Labor-management at the summit?

February 19, 1968

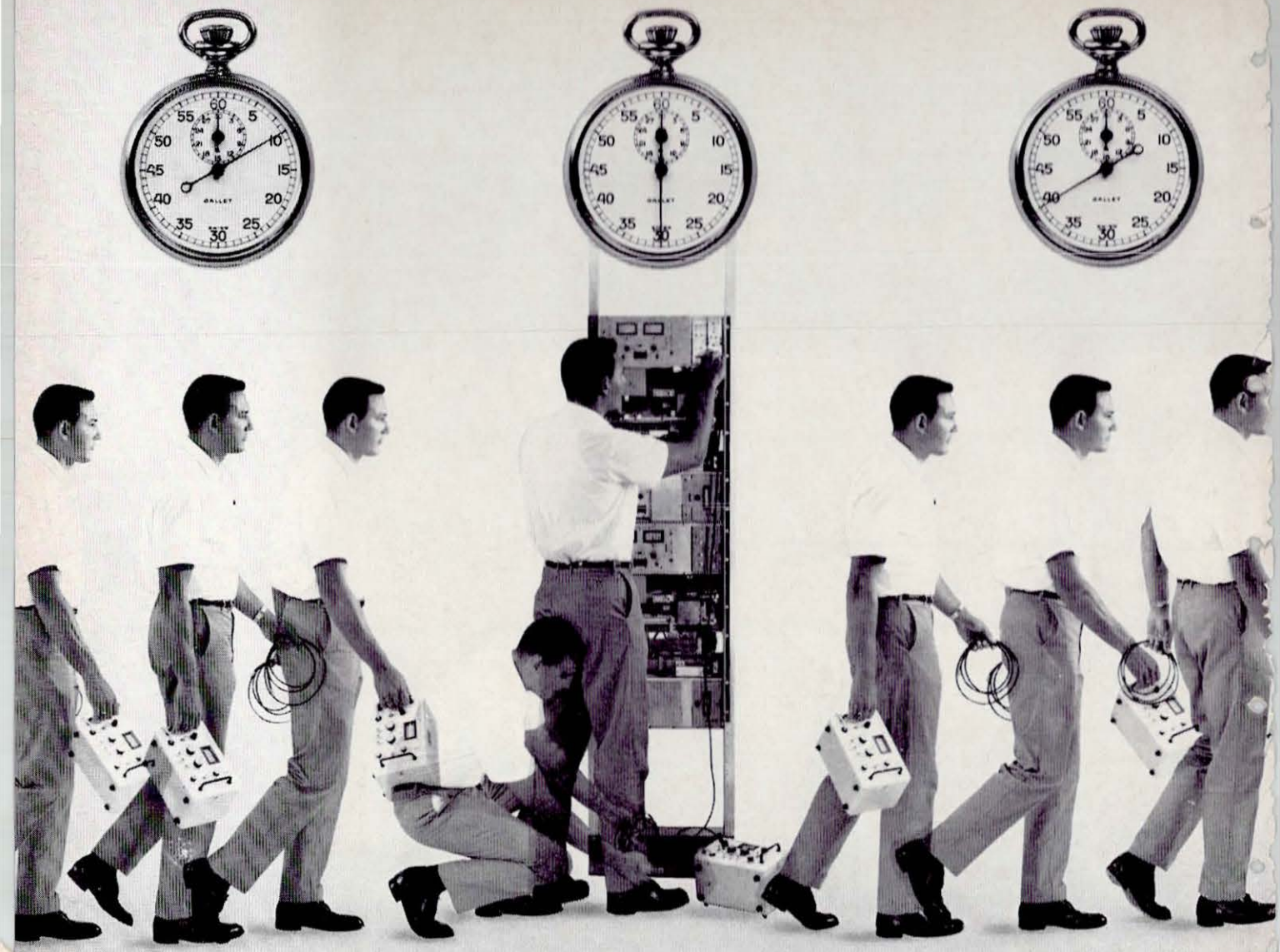
RAILWAY AGE

THE TRANSPORTATION WEEKLY

McCARTNEY LIBRARY
GENEVA COLLEGE

POWER POOLS

FEB 19



Deviation and Level Adjustments in Seconds

That's how long it takes one man to make these adjustments on Collins new "D" series of remodulating microwave systems. These adjustments — the two most important of the maintenance procedures — can be made while the system's in service.

With new transmitter afc circuitry (a built-in receiver), rf deviation can be checked and adjusted with only one piece of equipment — Collins' new inexpensive pilot selective voltmeter. Level adjustments can be made easily and accurately at all baseband points with a Collins 70D1-2MW Deviation Calibrator and an ac voltmeter.

That's all the test equipment needed for minor maintenance. It's lightweight, inexpensive, and specially designed for field operations. All other test equipment — including metering equipment, jackfields, isolated coaxial test jacks, test points, and waveguides — is built in. All with front access.

For additional information on the most easily maintained remodulating microwave system in the industry, contact Collins Radio Company, Microwave Marketing Department, Dallas, Texas. Phone: (214) AD 5-9511.

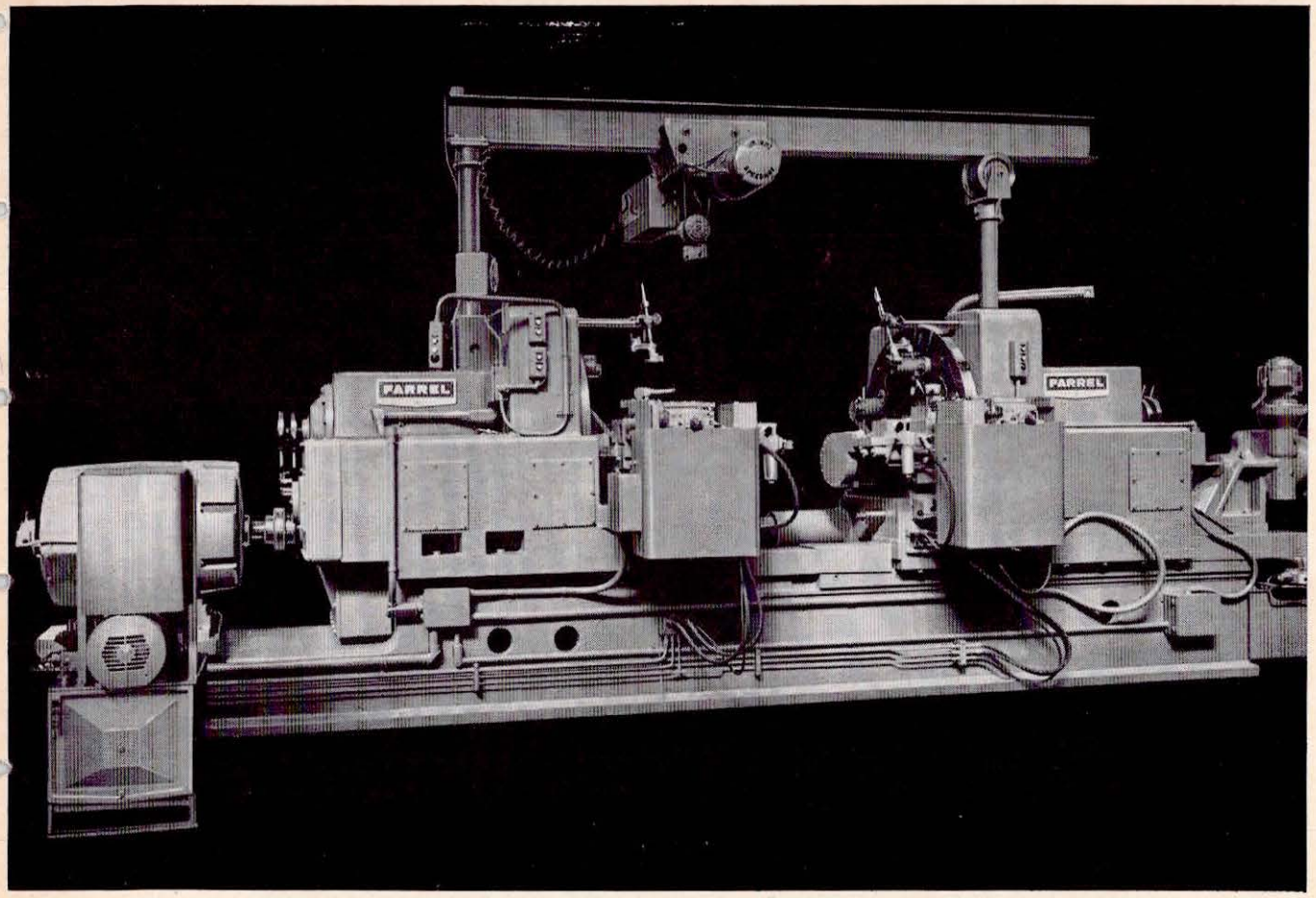
COMMUNICATION / COMPUTATION / CONTROL

COLLINS

COLLINS RADIO COMPANY / DALLAS, TEXAS • CEDAR RAPIDS, IOWA • NEWPORT BEACH, CALIFORNIA • TORONTO, ONTARIO

Bangkok • Beirut • Frankfurt • Hong Kong • Kuala Lumpur • Los Angeles • London • Melbourne • Mexico City • New York • Paris • Rome • Washington • Wellington

Circle 1 on reader service coupon



this new 50" tracer-controlled wheel lathe

can reprofile two wheels in 20 minutes!

That was the *average* floor-to-floor time required in tests of this amazing new machine taking cuts up to ¾" depth on both wheels simultaneously. This is up to six times as fast as many old machines still being used in wheel shops!

But, speed is not the only advantage you get. Simplicity of operation is of equal importance. The design incorporates a straight-hydraulic tracing system which requires only four controls to cut the wheels: 1. an infinitely variable spindle-speed potentiometer, 2. a governor-valve knob to vary feed rates, 3. a four-position toggle switch to control direction of feed or traverse of the tool slides, and 4. a rapid-traverse push button. With such simple control, learning to run the machine requires minimum instruction.

Advanced design changes are incorporated to provide ease of maintenance. For example, adjustments and maintenance of the tracing systems can usually be corrected by average maintenance personnel.

Write today for complete details and specifications.

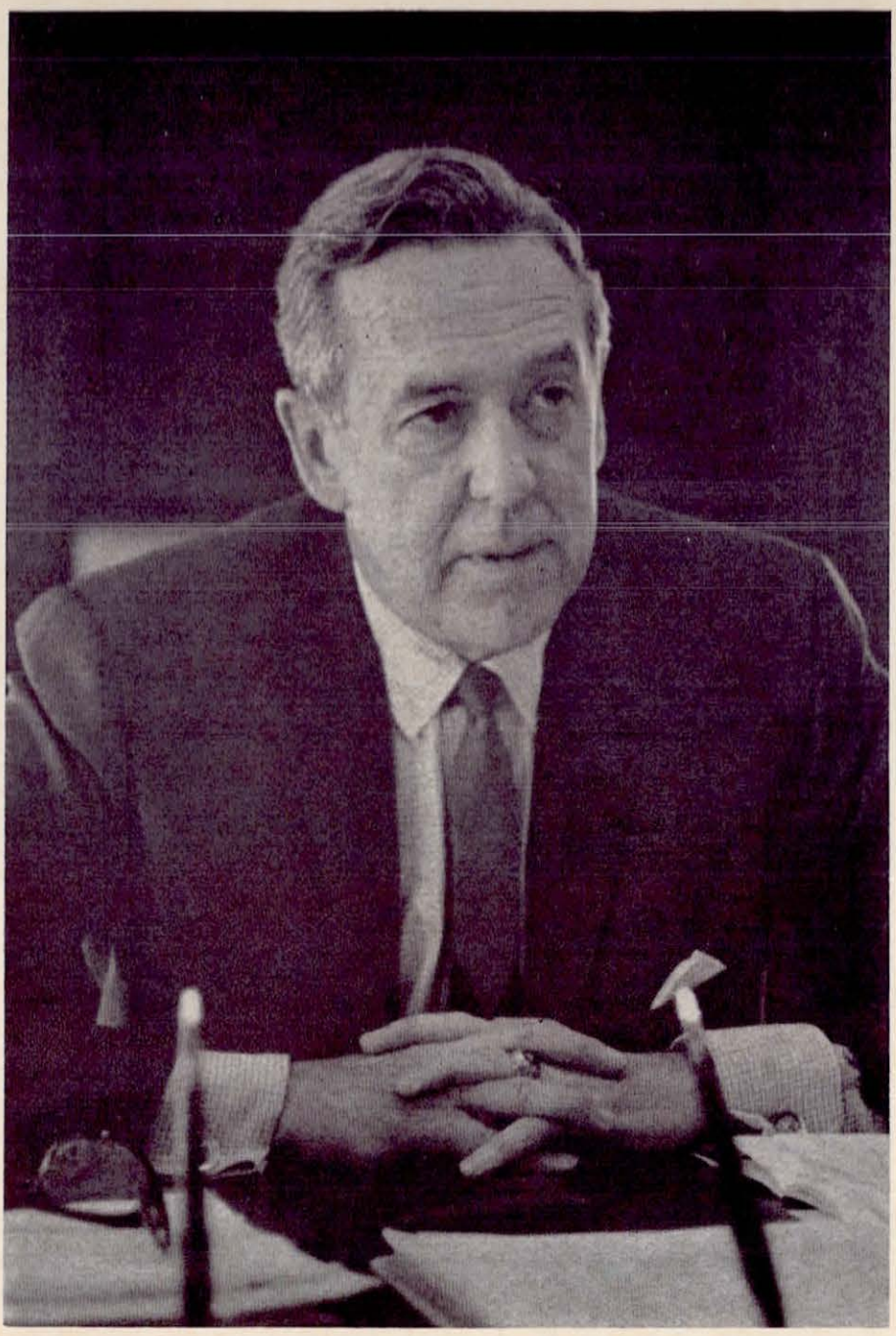
FARREL®

FARREL CORPORATION
RAILROAD EQUIPMENT DIVISION
565 Blossom Road, Rochester, New York 14610
Telephone: 288-4600 (Area Code 716)

FR-242

THE WORLD'S MOST COMPLETE LINE OF WHEEL-SHOP EQUIPMENT: Wheel Lathes • Dual End-drive Axle Lathes • Car-wheel Borers • Underfloor Wheel-truing Machines • Mounting and Demounting Presses • Completely Automated Wheel and Axle Shops • Automated Axle Manufacturing Machining Centers

Circle 3 on reader service coupon



Burlington Route

WILLIAM J. QUINN, PRESIDENT
Burlington Lines

"Railway Age serves as a useful and valuable intelligence network that reports each week a surprising number of the many changes and innovations taking place in the fast-moving railroad industry.

"For this reason it is high on my list of required reading."

William J. Quinn

RAILWAY AGE February 19, 1968 • Vol. 164, No. 7

THIS WEEK

litorial and Executive Offices
ew York, N.Y. 10007, 30 Church St.

OBERT G. LEWIS: Publisher
UTHER S. MILLER: Editor
RED C. MILES: Executive Editor

anaging Editor: Edward F. Donlon
sit Editor: Joseph Asher
lechanical:
C. L. Combes F. N. Houser
t Director: Joel Petrower
rt Editor: Maurice H. Mates
t Assistant: Thomas J. Pendergast
ditorial Assistant: June Meyer
irector of Research: H. B. Bolander
arian: Edith C. Stone
roduction Manager: Fred B. Hecht
lanager—Contract Department:
Constance Nicolai

ditorial and Executive Offices
hicago, Ill. 60604, 14 E. Jackson Blvd.

AMES FISHER: Vice President—Sales
GUS WELTY: Senior Editor
Western Editor: Frank Malone
lechanical: Robert D. Bartley
ngineering:
M. H. Dick R. E. Dove
ignaling & Communications:
Robert W. McKnight E. L. Abbott
orial Assistant: Wanda Brown

Washington, D.C. 20004,
National Press Bldg.
Washington Editor: Walter J. Taft

London, W.C. 2, England, 4, Talbot
House; 98 St. Martin's Lane
nternational Editors:
Geoffrey Wilson John Levett

Contributing Editors:
Norman E. Gillespie
3205 Chelsea
Orlando, Florida 32803

Charles Layng
115 West Gore St.
Orlando, Florida 32806

E. L. Woodward
876 Chattanooga Ave.
Pacific Palisades, Calif. 90272

GEORGE DUSENBURY: Editorial Director

R LIST OF SALES OFFICES
SEE INDEX PAGE

POWER POOLS

18 They avoid terminal delays and save money
The latest about a growing freight-speeding technique.

15 RSP carbuilding shop adds repair facility
The corporation can make heavy and light repairs to most cars.

44 Viewpoint: Do labor and management know each other?
Railroad health—for employees and management—should be the goal.

DEPARTMENTS

31	As the Editor Sees It	32	People in the News
33	Dividends Declared	41	Railway Bookshelf
37	Freight Carloadings	7	Short and Significant
27	Letters from Readers	33	Supply Trade
14	Lines on Labor	44	Viewpoint
8	Monday Morning Report	42	Watching Washington
37	New Equipment	12	Week at a Glance
36	New Products Report	40	You Ought to Know

. . . AND COMING NEXT WEEK

What's going on in containerization—and what's likely to be going on in the future? In the Feb. 26 issue of Railway Age these and other questions will be answered in a report that includes an in-depth interview with G. Russell Moir, chairman and chief executive officer of the world's largest freight forwarder, U.S. Freight Co. Like all Freight Traffic issues, this one will be mailed to 10,000 leading shippers as well as to the regular list of subscribers.

Railway Age, established in 1856, is indexed by the Business Periodicals Index, the Engineering Index Service and the Public Affairs Information Service. Name registered in U.S. Patent Office and Trade Mark Office in Canada.
Published weekly (except for four issues combining two-in-one) by the Simmons-Boardman Publishing Corporation at 440 Boston Post Road, Orange, Conn.
Railroad employees' subscription rate. U. S. possessions, Canada and Mexico, $6 one year, $9 two years, all others $15 for one year, payable in advance and postage paid. To railroad employees elsewhere in the western hemisphere, $10 a year. In other countries, $15 a year. Single copies, 60¢ except special issues. Address all subscriptions, changes of address and correspondence concerning them to Subscription Dept., Railway Age, Emmett St., Bristol, Conn. 06010.
Change of address should reach us three weeks in advance of next issue date. Send old address with new, enclosing, if possible, your address label. Post Office will not forward copies unless you provide extra postage.

Circulation Dept.: John Rogers, Director of Circulation, 30 Church St., New York, N.Y. 10007. POSTMASTER—SEND FORM 3579 TO EMMETT ST., BRISTOL, CONN. 06010.
Printed at the Wilson H. Lee Co., Orange, Conn. 06477. Second-class postage paid at Orange, Conn. and at additional mailing offices.

from Marquardt Industrial Products...

THE NEW PULSE MODULATED TRACK CIRCUIT

MIPCO INTRODUCES the Pulse Modulated Track Circuit, a new solid state audio frequency system now available in configurations which operate compatibly ***with A.C. or D.C. electric propulsion currents, D.C. coded track circuits, A.C. signal circuits, and coded cab signals.*** This latest MIPCO addition to a broad line of electronic grade crossing and signal control systems operates on a unique pulse modulation technique which overcomes external interference problems characteristic of conventional tone devices. Requirements for insulated joints and impedance bonds are minimized or eliminated entirely, depending upon specific applications.

FEATURES OF THE MIPCO PULSE MODULATED TRACK CIRCUIT

- **Eliminates most insulated joints and impedance bonds!**
- **Up to 11 operating frequencies with selective pulse modulation rates!**
- **Increased power output; low power drain!**
- **Maximum operational security through a digital code modulation system!**
- **Reliable fail-safe operation under extreme environmental conditions!**

Ask your MIPCO representative about the PMTC family of products and the complete line of electronic track circuits and grade crossing protection systems designed for your specific applications.

MARQUARDT INDUSTRIAL PRODUCTS

SYSTEMS AND COMPONENTS TO SERVE THE RAILROAD INDUSTRY

MIPCO offers an expanding product line and diversified services to meet the continuing demand for modernization by the railroad industry. Call upon MIPCO for new systems and components for improved, efficient service at lower operational and maintenance costs.

Railway Signals & Controls
2771 No. Garey Avenue
Pomona, California
- *Grade Crossing Predictor Systems (GCP)*
- *Electronic Track Circuits (ETC)*
- *Pulse Modulated Track Circuits*
- *Constant Voltage Rectifiers*

Chicago Division
4320 W. Montrose Avenue
Chicago, Illinois

Howard & Gould Products
- *Signal Rectifier and Transformer Systems*
- *Tie-boring and Bonding Drills*

R. W. Neill Products
- *Communications Systems for Railway Classification Yard Applications*
- *Communications Consoles, Voice Paging Systems, Loudspeakers, Related Components*
- *Radio Control Equipment, Solid State Amplifiers, Remote Line Test Units, Power Supply Systems*

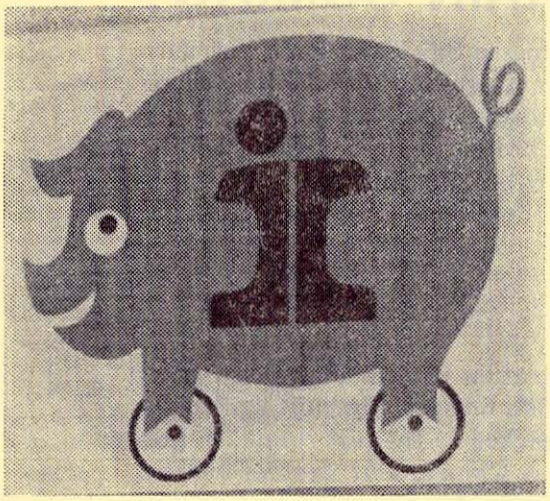
REGIONAL OFFICES:
Chicago: 4320 W. Montrose Avenue
Philadelphia:
1617 John F. Kennedy Blvd.
Jacksonville, Florida:
1914 Beachway Road
Canadian Representative:
Vale Enterprises, Ltd.
1120 Claire Crescent
Lachine (Montreal), Quebec, Canada

RPI
RAILWAY PROGRESS INSTITUTE

MARQUARDT INDUSTRIAL PRODUCTS CO.

Circle 4 on reader service coupon

SHORT AND SIGNIFICANT



IC will expand TOFC fleet

There'll be a flashy TOFC symbol to go with Illinois Central's new corporate mark March 1, when IC starts taking delivery of 595 40-foot aluminum trailers to be built by Theurer, Inc., of Newark, N.J., and leased by U.S. Leasing Corp. Along with the orange pig-on-wheels, all the trailers will have interior side rails for load-protecting devices, and many will be equipped for special lading, including 10 fitted with bulkheads for ammunition loading. Ten open-top trailers are among the 595 units being acquired.

Lamberts Point coal dumping: Color it black

Norfolk & Western dumped a record 2,604,342 tons of coal over its Lamberts Point pier at Norfolk, Va., in January —highest tonnage for any month in the company's history. The record month followed a record year. N&W dumped 27,028,365 tons of coal at Lamberts Point in 1967, highest annual tonnage since the road moved its first car of coal from the mountains to tidewater in 1883. The 1967 tonnage topped the previous high (1965) by 198,296 tons.

Plywood shipments rise; boxcar shortage feared

The American Plywood Association says a shortage of boxcars appears imminent for late February all along the West Coast. The shortage is already being felt in Oregon and is expected to spread to California and Washington. Two reasons are cited by E. W. Hilton, manager of the association's traffic department: (1) unusually large shipments of plywood in January and February; and (2) the annual California business practice of holding off inbound shipments and expediting outbound shipments to reduce the inventory tax, which is assessed in March.

Railroads offer reduced fares to overseas visitors

While President Johnson tries to discourage U.S. travel abroad, the railroads have joined his campaign to lure more overseas travelers to the U.S. Effective April 29, U.S. railroads will offer reduced round-trip first-class and coach fares to visitors from abroad. The effect will be a 25% reduction in the currently applicable one-way fares.

Griffin Wheel invests in cleaner air

Griffin Wheel's Chicago foundry will be a nicer place to be around, come September. Over the next six months, the operating unit of AMSTED will spend $200,000 for installation of an air filtration system to control air pollution. The Fuller Co., a division of General American, will build the filtration equipment. C. P. Voll, Griffin president, calls the expenditure "worthwhile. Although our Chicago plant is a minor factor in the city's over-all air-pollution problem, as an interested corporate citizen, we decided to do something about it."

WP president assails petition delay

M. M. Christy, Western Pacific president, says the ICC suspension of action to discontinue WP's "California Zephyr" operation (RA, Oct. 23, 1967, p. 11) will force the railroad to keep on absorbing "unconscionable losses." He adds that pending hearings will show that WP's release from such losses "is necessary and clearly in the public interest."

MONDAY MORNING REPORT

FROM FORD: AN AUTO-TRAIN COMING?

That 'better idea" the Ford advertisements talk about isn't restricted to things like Mustang, Cougar or Continental. Ford Motor Co. regards itself as a transportation company, not just an automobile manufacturer. And that's why the promising but unfunded auto-train project may wind up as a venture bearing the Ford label. Final decisions haven't yet been made by Ford—but they'll probably be coming in the very near future.

A GOOD IDEA SEEMED TO BE GOING BROKE . . .

Auto-train, of course, is the demonstration project in which motorists and their cars would travel together, on specially built rail equipment. Washington-Jacksonville was picked as the test route. In preliminary studies, the idea looked like a winner. But the Department of Transportation didn't get the required money from Congress, Seaboard Coast Line declined to go it alone, and the whole project just hung there—until Ford took a look.

. . . AND THEN A NEWCOMER BEGAN ITS STUDIES

Foster Weldon, director of Ford's transportation research and planning office, talks of auto-train in terms of studies and checkpoints. The studies, marketing and financial, are nearing completion. Then, assuming it does, there will come a time when decisions must be made on expansion of the operation to other routes.

"THE OUTSIDERS": FACTORS TO BE RECKONED WITH

A few years ago, a noted sociologist looked at the railroad industry and wondered if real change might come when "industries where there's a great deal of technological competence would buy in and control and introduce technological change." There are those who contend that the railroads were saved after World War II by the diesel builders——dominant among them, General Motors—who sold mass-production as opposed to the every-man-a-designer theory of the steam locomotive days. Just yesterday, it seems, United Aircraft entered the railroad market. Now. perhaps, there's Ford.

STEEL WHEEL, STEEL RAIL: INTEREST KEEPS BUILDING

In a way, it's an ironic situation. Many of the old-line railway suppliers have been diversifying in the 50's and 60's, as well they might in order to protect themselves against the notorious ups and downs of railroad buying. At the same time, outside companies are bidding for places in the market. The old don't leave, the new keep coming. Rail transportation must have something going for it.

WEREN'T YOUR PARTS SYSTEM TESTED?

(Pity. GE system-tests all parts)

General Electric renewal parts are tested in all the conventional ways. But the original manufacturer can go one big step further. We can run parts in . . . and wring them out, under up-rated conditions, on exactly the same equipment you'll be using them in. We can, and we do!

System testing — something only the original manufacturer can provide.

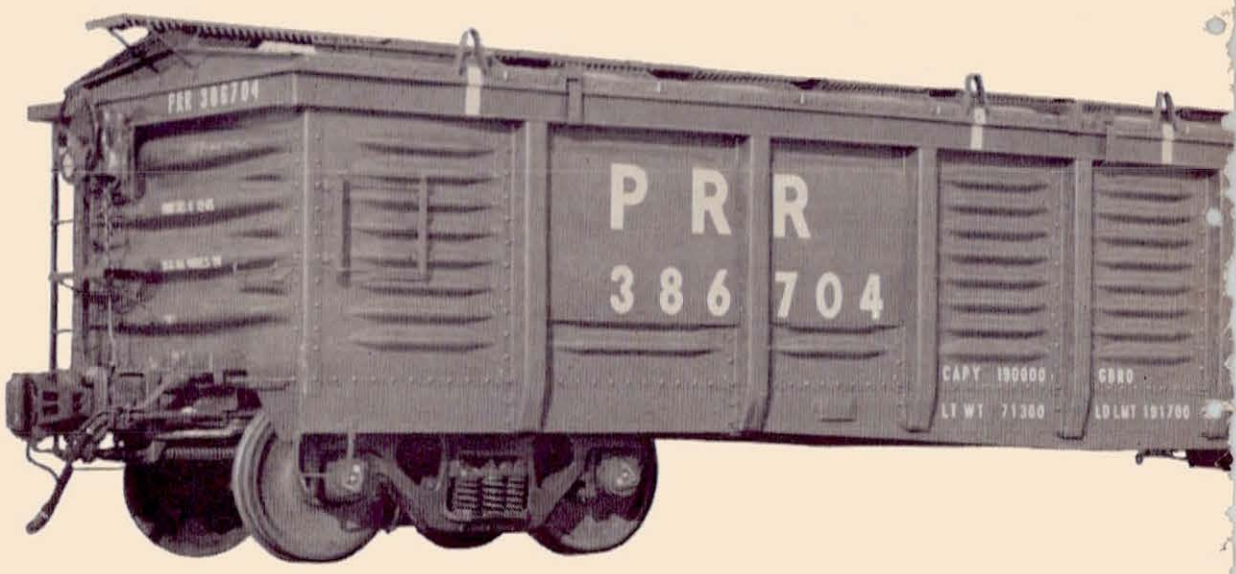
GENERAL ELECTRIC

121-37

PARTS SALES OPERATION, ERIE, PENNSYLVANIA • YOUR SINGLE-SOURCE SUPPLIER FOR GE TRANSPORTATION EQUIPMENT.

Circle 5 on reader service coupon

"Do Standard components

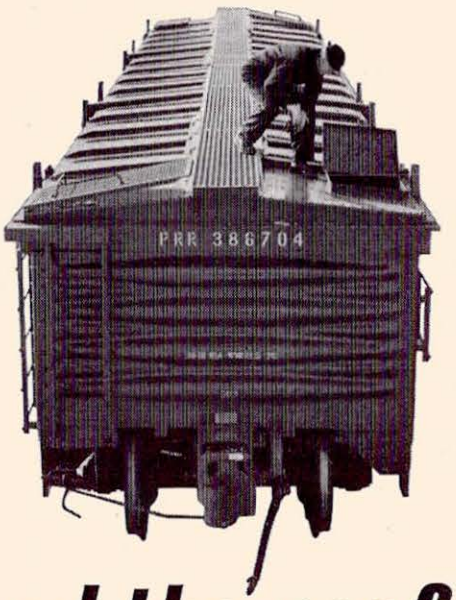


No, pretty much on the sides

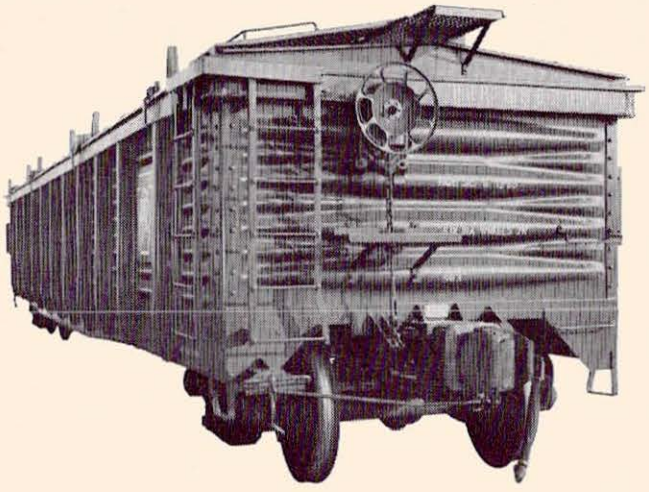
Standard corrugated sides, pictured on new gondola. This modern, covered gondola, PRR-designed, provides all-weather protection for the transportation of various steel commodities.

If your railroad cars have sides, ends, roofs or floors—if you intend coupling them to other cars—then Standard components can save you money. The proof is easy to have: just phone your Standard representative.

go everywhere?"



...the ends ...and the roof



Above: Standard 3-piece removable roof, showing inspection hatch.

Left: Standard dreadnaught steel ends and coupler centering device.

STANDARD RAILWAY EQUIPMENT
division of STANRAY CORPORATION
Hammond, Indiana • Chicago

MEMBER RPI RAILWAY PROGRESS INSTITUTE

Circle 6 on reader service coupon

RAILWAY AGE
THE TRANSPORTATION WEEKLY
February 19, 1968

WEEK AT A GLANCE

BRT strike ends, negotiation terms are agreed to...

Negotiations are under way in an effort to bring a settlement in the crew-consist disputes which touched off strikes in the southeast and southwest earlier this month. Under terms of a memorandum-of-understanding involving the Brotherhood of Railroad Trainmen and Missouri Pacific-Texas & Pacific, Seaboard Coast Line and Southern, BRT and railroad representatives have until March 15 to reach a negotiated settlement.

If they can't reach agreement, the dispute goes to the presidential level—for a meeting which could involve the BRTs Charles Luna, MP-T&P's Downing B. Jenks, SCL's W. T. Rice and Southern's W. Graham Claytor, Jr.

If both the negotiators and the presidents fail to agree, then the situation could go back to the self-help stage, where it was two weeks ago. In the meantime, MP-T&P and SCL are back in business, and new rules posted by MP-T&P, SCL and Southern have been pulled back.

...and bargaining begins on "negotiable jobs"

Under the negotiating formula, a check was to be made of the week prior to Feb. 5 to determine how many road and yard jobs were worked with one-and-one crews — conductor-and-brakeman and foreman-and-helper. Jobs worked one-and-one on a majority of the seven days were to be listed as "negotiable." All crews not on the list were to be worked one-and-two—conductor-and-two-brakemen or foreman-and-two-helpers. Half of the negotiable jobs—by carrier's choice—were then to be restored to a one-and-two consist basis, subject to the availability of manpower. And the bargainers were to devote their attention to determining which, if any, of the remaining 50% of the jobs should be brought to one-and-two status.

At the time the dispute broke into the open with BRT's strike against MP-T&P, six other roads had reached the self-help stage in the consist dispute. Three, in addition to MP-T&P, then sought to implement rules changes.

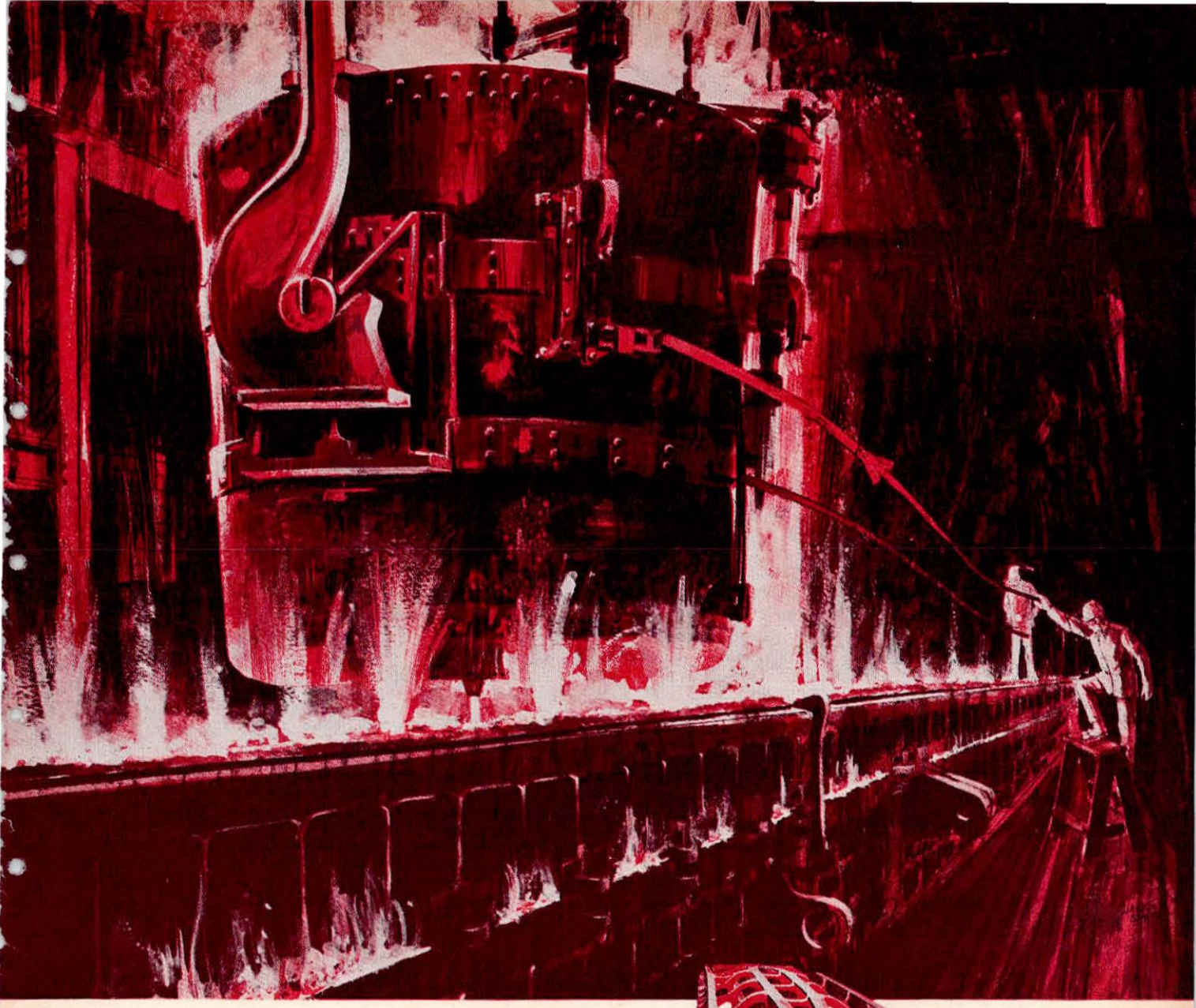
Inside the TurboTrain: Jet-like decor

First photos of the completed interior of United Aircraft's TurboTrain (built by Pullman-Standard) were released last week. They reveal a striking similarity to the decor used in first-class jetliner service. Center or intermediate cars (above) have wide, high-backed reclining seats with headrests. Fold-down tables enable passengers to dine at their seats. Air conditioning exhausts directly above seat and reading lights are individually controlled.

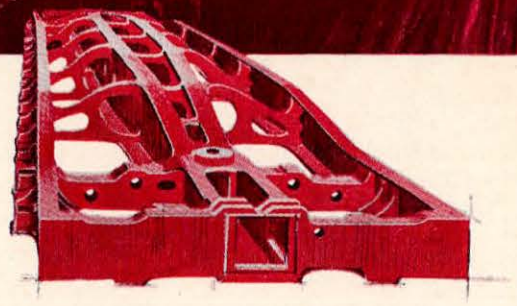
Rate hike left at $300 million

The ICC's final decision in the Ex Parte 256 rate case changes some adjustments authorized in the Commission's interim report of last July, but leaves the prospective annual yield the same—$300 million. The railroads sought increases designed to yield $327.6 million a year. The decision was served Fed. 15.

Modifications of the interim increases involve rates on fruits and vegetables, pulpwood, fertilizer, cement, aggregates, iron and steel scrap, coke, scrap paper, rags and LCL, and charges for switching and for holding grain cars for inspection. It is expected that these modifications, involving some further increases and some reductions, will offset each other to a substantial extent.



MEMBER RPI RAILWAY PROGRESS INSTITUTE



30 years from now this new GSI freight car underframe...will still be a new GSI freight car underframe. It's cast steel. Time won't age it. Impact won't faze it. Maintenance is zero. So your car spends more time in service.

GENERAL STEEL INDUSTRIES INC.

CASTINGS DIVISION

GRANITE CITY, ILL. • PHILADELPHIA, PA. • SAN FRANCISCO, CALIF.

GSI

Circle 7 on reader service coupon

GUS WELTY

LINES ON LABOR

PRIDE AND UNDERSTANDING are two words that have to be taken into consideration when you sit down to add up the pros and cons of a labor-management summit meeting. Both the RLEA and the AAR say they want such a meeting, and presumably one or more will be held. Hopefully, labor and management will be talking the same language when they get together.

UNION LEADERS like to meet with management leaders, president to president, chief to chief, nose to nose. Not so long ago, for instance, the top officer of one major union got an interview going not with any declaration of union policy but rather with a vivid description of how, after local negotiators had messed up a situation and a strike was threatened, he'd picked up the phone, called the railroad's president, and they'd settled the matter then and there. There was pride in his voice.

MANAGEMENT LEADERS often seem to want to believe that their counterparts don't know the score, that they're stiff-necked and unmovable because they don't understand the private-enterprise system, or because they're interested only in keeping the union treasury full. But not so long ago, as the top officer of one major union got an interview going, he idly riffled through his morning mail—tossing into one pile his stock dividend checks. Obviously, this individual understands the system.

THE OLD IMAGE of a railroad president as some bewhiskered Joshua Phlatwiel who thinks all union people are bolsheviks? That's gone. The old image of a union president as some unlettered Ike Greever who thinks all management people are thieves? That's gone, too. Today, the people with a future—on both sides—are the people who take the time and trouble to learn about the other fellow's problems.

THE RECENT UNPLEASANTNESS involving the matter of crew-consist was, if nothing else, educational. It illustrated the possibilities open to both sides through "self-help." It also illustrated the consequences of reliance on "self-help." It was like the old story, where the one fellow says to the other fellow, "You know, I dreamed last night that you and I were the only entries in a beauty contest—and nobody won." Under the circumstances, it would seem that it's time to put aside the antagonisms and try working together, with positive goals in mind. If a summit meeting of labor and management will help, then on to the summit.

E-L scheduled to join N&W on April 1

The Erie Lackawanna tentatively will join the Norfolk & Western system on April 1, an N&W officer said last week.

John P. Fishwick, N&W senior vice president, told the Interstate Commerce Commission that "all the necessary papers—or nearly all" have been approved by both companies and "we are shooting for April 1."

E-L is one of three eastern lines which the ICC ordered the N&W to offer inclusion in its system whether or not N&W's proposed merger with the Chesapeake & Ohio is approved. The ICC also set the terms for the inclusion and the Supreme Court upheld the order last month.

In proceedings before the ICC last week, the Boston & Maine—one of the three lines—said it also will ask for inclusion in the N&W and indicated it would soon file a formal petition. Stockholders of the Delaware & Hudson, the third line, are to vote on inclusion terms April 24.

B&M's announcement of its intention to ask for inclusion came after a request by N&W attorneys that B&M clarify its position with respect to the merger proceedings—that is, did the road want to enter the N&W system or not.

N&W and C&O had offered to take in the three lines and the Central of New Jersey and the Reading as part of the so-called five-line Dereco system that would operate as an N&W-C&O subsidiary.

CNJ's inclusion in the N&W-C&O is assured, Fishwick told the Commision. Only agreement on terms remains to be reached.

GNP&B completes its job-protection pacts

The roads which hope soon to become the Great Northern Pacific & Burlington have completed negotiation of job-protection agreements—with the Switchmen's Union of North America coming in as the 21st and last labor organization to sign up. SUNA represents about 1,200 employees on Great Northern. Like previous agreements, this one gives virtual assurance of lifetime jobs for affected workers. George J. Kelley, SUNA general chairman on GN, said the "exceptionally fine results of our collective bargaining . . . will offset any employment disadvantages to switchmen and should operate to create an efficient and productive rail operation."

RSP carbuilding shop adds repair facility

Plans also call for expansion of ability to build new cars. Some diesel repairs can be made now.

Down Texas-way, a relatively new carbuilding shop is on the rise. It admits, for the time being anyway, to being small. But, to the RSP Railway Equipment Corporation, small is something you must endure on the way to growing big. And growth is the thing taking place at RSP.

In Roscoe, near the throat of the West Texas panhandle, RSP has just added a new 520- x 60-foot all-metal repair building to its car service complex.

RSP didn't exist six years ago. Today, it has a new-car-construction program and can handle both heavy and light repairs on almost any type of freight car. Its beginning can be traced back to the spring of 1962, when its carbuilding staff of five men started making light repairs on cars operating along the Roscoe, Snyder & Pacific, which owns RSP.

Today, the company has a staff of 80. In addition to the new repair building, it has facilities for sandblasting, painting, stenciling, air brake repair and other carbuilding-associated services. Recently, RSP displayed its versatility by designing and building a lumber flat car, complete with A-frame and built-in cables and winches, and an inflatable bulkhead flat car for transporting palletized bricks.

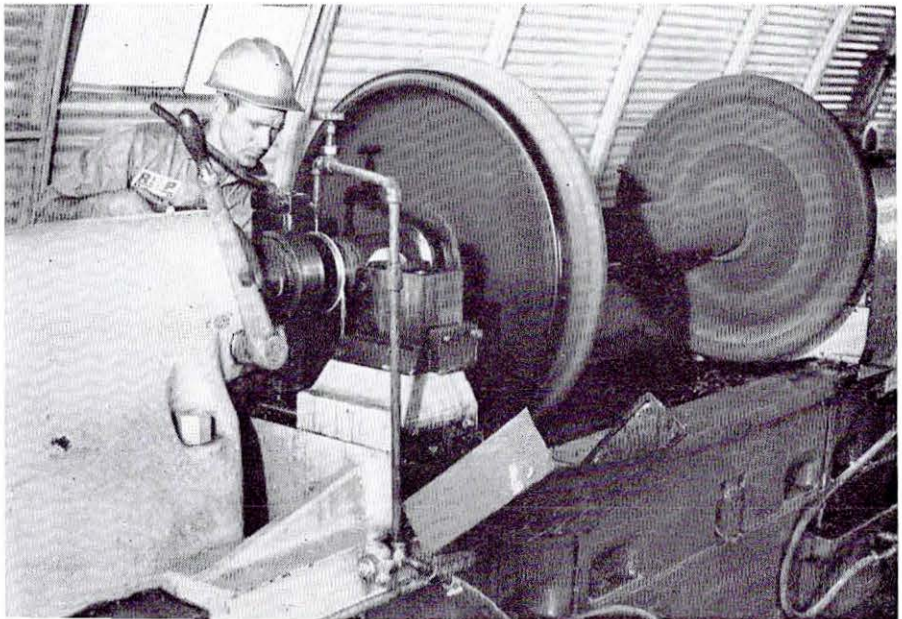
Plans are being formulated for expansion of new-car-construction operations. Meanwhile, the Texas carbuilder is concentrating its efforts on light and heavy repair work, including stretch-out.

The RSP complex covers over 10 acres dotted with service buildings, offices, outdoor car servicing areas and storage and parking facilities. Since completion of its new repair building, RSP is prepared to tackle repairs on all types of freight cars, except for those in heavy petroleum, pitch and molasses service.

In its light and heavy repair programs, the RSP shop's daily output averages about three cars. The new shop is equipped with air brake test racks, a bearing puller, axle lathe and other equipment required for heavy repair programs. Also, as an added service, RSP will perform diesel engine repairs, but on a small scale. ■

LATEST ADDITION to car shop services provided by RSP Railway Equipment Corp. of Roscoe, Texas, is this repair building, which is 520 feet long, 60 feet wide.

MODERN EQUIPMENT, like this axle lathe, is a prime factor behind steady growth of RSP services. Company can handle heavy and light repairs on most car types.



These cars need a tough hide to protect them from the weather.

Nature's elements—rain, sleet, snow—help railroad cars made of USS COR-TEN A High-Strength Low-Alloy Steel maintain themselves. Alternate wet and dry conditions cause a tight oxide coating to form on unpainted surfaces of COR-TEN A steel boldly exposed to the atmosphere and at scratches or breaks in exposed painted surfaces. COR-TEN steel thus protects itself, or prevents undercutting and flaking of the paint. This action results from COR-TEN A steel's superior resistance to atmospheric corrosion—5 to 8 times as good as that of carbon steel.

Paint lasts up to twice as long and COR-TEN steel is approximately 40% stronger than structural carbon steel. That's why some USS COR-TEN Steel cars

built in the Forties are still in service.

Owners like the longer life of cars built with COR-TEN. Shippers like the greater dependability of COR-TEN equipment. Whether you build or use hoppers, gondolas, boxcars, or whatever, the special properties of USS COR-TEN High-Strength Low-Alloy Steel will work hard for you in *all* kinds of weather. The next time you lease or buy, check on it.

Contact our nearest sales office for the latest information on USS COR-TEN Steel or the entire USS Family of Steels. Or write United States Steel, Room 4970, 525 William Penn Place, Pittsburgh, Pennsylvania 15230. USS and COR-TEN are registered trademarks of United States Steel.

USS United States Steel: where the big idea is innovation

POWER POOLS

Avoid terminal delays and save money

What was a locomotive like New York Central's No. 2372 road-freight unit doing in Poplar Bluff, Mo.? Running south to Little Rock, Ark., or north to Cleveland by way of St. Louis and Indianapolis, that's what. And with three Missouri Pacific GP18s right behind it. Central and MoPac locomotives have moved daily freight trains each way on that route for more than a year.

Call it power pooling, locomotive interchange, power inter-lining, through-service, through-running, or train-through operation, there's just one goal —to tie mainlines together without freight-yard knots. And Central and MoPac weren't the only ones doing it.

● **To improve service.** Currently, more than 20 railroads are involved in locomotive inter-lining for freight and/or passenger traffic. While a number of passenger pools are historic things, the emphasis on freight-power pooling is a new and growing element in inter-road cooperation for improved service.

Altogether, these 20-plus roads assign about 3% of their road power to pools. The practice generally is for power of the roads involved to run in tandem over the full inter-road route and around congested terminals, as in the NYC-MP arrangement. Speeded-up service resulting from terminal bypassing is the main benefit cited by officers of power-pooling roads. It's also the reason there's more pooling to come.

● **Penn Central arrangements.** A last minute check shows that pooling arrangements with the new Penn Central are operating much as they did with New York Central and Pennsylvania. Richard B. Hasselman, Penn Central assistant vice president-transportation (had same office with NYC), says there are no immediate plans for changing arrangements based on former New York Central routes. A spokesman for the Pennsy half says there will be changes in pools based on former Pennsylvania routes, but he gave no date for their implementation.

On the NYC side of Penn Central pooling, there's this lineup. In addition to the Cleveland-Little Rock run, there is an operation with MoPac between Indianapolis and Kansas City, for interchange of 17 units. Between Indianapolis and Pine Bluff, Ark., NYC interchanges five units with Cotton Belt and there is a 16-unit arrangement with Burlington for a Boston-St. Paul run.

Other pools on former NYC routes are with Boston & Maine and Pittsburgh & Lake Erie, between Bow, N.H., and Newell, Pa.; and with Toronto, Hamilton & Buffalo, between Buffalo and Toronto. And since 1933, NYC and Illinois Central have cooperated in moving NYC (Big Four) passenger trains bound for Indianapolis and Cincinnati from Central station in Chicago.

And on the Pennsy side, there is a pool of 13 units with Union Pacific and Burlington for daily operation of freight trains between Enola, Pa., and Green River, Wyo., through Chicago and Grand Island, Neb. Also, 14 units are interchanged with Cotton Belt between Harrisburg and Pine Bluff, Ark., four with Detroit, Toledo & Ironton between Mingo Junction and Detroit, and two with Louisville & Nashville and Seaboard Coast Line for passenger runs to Florida from Chicago.

● **N&W-UP: half a continent.** A map of current inter-line routes would show the nucleus of a possible future network of high-speed transcontinental railpaths. A good example is the 1,350-mile operation of Norfolk & Western and Union Pacific between Buffalo, N.Y., and North Platte, Neb. The trip is made in 42 hours as traffic moves in pre-classified blocks that are picked up or dropped at important connecting points with other railroads, such as Kansas City (where inter-lined power and cabooses move from one road to the other), Decatur, Ill., Peru, Ind., and Bellevue, Ohio. This operation can extend as far west as Cheyenne, Wyo., and can end at Bellevue or Decatur.

In addition, N&W has an arrangement with Western Maryland for movements between Hagerstown, Pa., and Bellevue, with connections at Connellsville, Pa.

● **Other power alliances.** The roster of pooled-power alliances also includes these combinations:

—Great Northern pools power with Western Pacific and Spokane, Portland & Seattle between Vancouver, Wash., and Keddie, Calif., and has an exchange arrangement with Burlington for short runs in Montana and Nebraska.

—Baltimore & Ohio works together with Reading, Central of New Jersey, and Western Maryland for a number of runs in eastern states.

—Rock Island has operated daily with New York Central between Silvis, Ill., and Elkhart, Ind., and with Southern Pacific for freight runs between El Paso, Tex., and Kansas City as well as on passenger runs between Chicago and Los Angeles. SP also runs with Northern Pacific between Eugene, Ore., and Seattle, Wash.

—Union Pacific, in addition to pools already mentioned, combines power with the Frisco between Cheyenne and Birmingham, Ala., going interline at Ellsworth, Kan.

—Illinois Central operates jointly-powered freight trains with Chicago & North Western between Waterloo, Iowa, and Minneapolis, and passenger trains with Central of Georgia between Chicago and Florida.

—Southern Pacific, in addition to its Rock Island arrangements, runs power with Rio Grande between Salt Lake City and Roseville, Calif., for bypass of SP's yard at Ogden, Utah, where the roads meet.

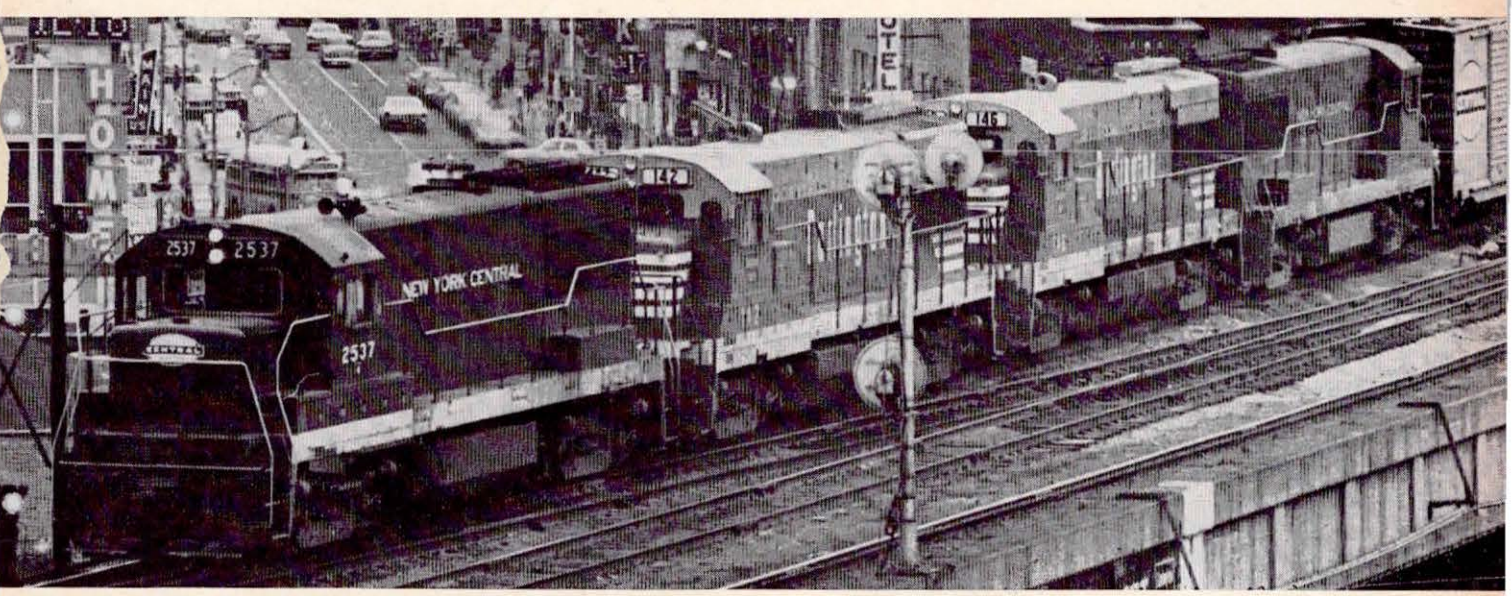
● **Some benefits of pooling.** Ask a transportation officer why his railroad is involved in power interchange and the answer will be: "We avoid terminal delays." A New York Central spokesman puts it this way: "We haven't attempted to place a dollar value on the benefits of power pooling, but we do know that the resulting train-through operations have expedited movements

SOUTHERN PACIFIC **COTTON BELT** **NEW YORK CENTRAL**

THREE-WAY POWER from participating railroads prepares to move a freight out of refueling station at Avon, Ind.

PENNSYLVANIA RAILROAD **BURLINGTON**

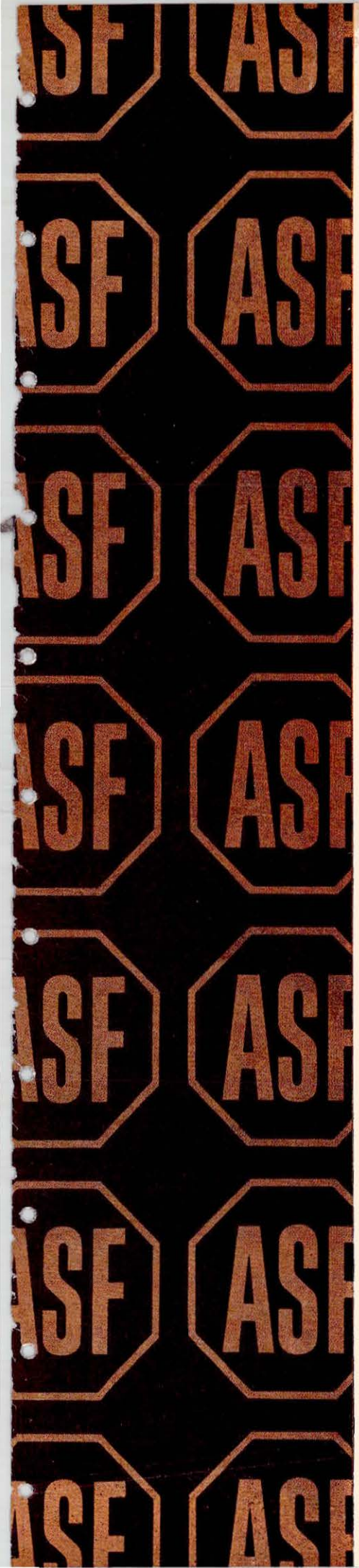
THE HEAD END of a freight moving out of Harrisburg, Pa., to Chicago includes Pennsylvania and Burlington locomotives.



NEW YORK CENTRAL **BURLINGTON**

FREIGHT TRAIN moving out of Aurora, Ill., is powered by New York Central and Burlington locomotives.

RAILROAD HALL OF FAME



There is only one Ride Control® truck

ASF

Imitation is a sincere form of flattery.

The long-time popularity of ASF trucks makes it common to misuse the name "Ride Control" when referring to other trucks with lesser known built-in snubbing devices.

But don't be misled. There's only one Ride Control Truck.

Why?

Because Ride Control Trucks feature the longer-lasting exclusive ASF snubbing system that constantly controls vertical and lateral bolster movement. Rotation Stops help stabilize the bolster and prevent loss of load coil springs during end impacts.

ASF provides the smooth riding qualities required for today's high speed freight service. And it's a fact that ASF's built-in ruggedness reduces overall maintenance costs.

All these factors add thousands of profitable miles to the life of your freight car.

For more facts—see your ASF representative, or write American Steel Foundries, 1005 Prudential Plaza, Chicago, Illinois 60601.

ASF **American Steel Foundries**
ONE OF THE Amsted INDUSTRIES

"Canadian Manufacturer and Licensee, International Equipment Co., Ltd., Montreal 9, Quebec."

Circle 10 on reader service coupon

BURLINGTON UNION PACIFIC

HEADING WEST are Burlington units leading Union Pacific power in a run between Grand Island, Neb. and Green River, Wyo.

MO PAC NEW YORK CENTRAL

ARKANSAS BOUND, a through-service train powered by NYC and MoPac locomotives moves west from Indianapolis.

and eliminated terminal delays." NYC arrangements with Cotton Belt, for example, saved shippers in the area covered an entire day. The Central run with Burlington meant that Armour & Company can move fresh meat from St. Paul to Boston in weekly shipments aboard giant Burlington refrigerator cars in 57½ hours. And the NYC run with MoPac between Cleveland and Little Rock saved shippers 24 hours on cargo through the St. Louis gateway.

The N&W-UP run from Buffalo to North Platte produces a saving of 12 hours in terminal time. And Pennsy arrangements with Burlington were "designed to speed coast-to-coast deliveries by as much as 24 hours," says Stuart T. Saunders, PC chairman. And the SP-D&RGW arrangement cuts 3 to 5 hours from previous schedules.

"The through-running operation of motive power is a fine practice, and represents another step in expediting freight movements, reducing terminal delays, utilizing equipment and improving dependability and customer service," says Rex R. Manion, AAR vice president, operations and maintenance. The benefit of better equipment utilization is illustrated by the following examples.

Great Northern works with Burlington to avoid a 24-hour idle layover of power in Laurel, Mont., near the roads' connecting point. After leaving its own tonnage at Laurel, Burlington power moves 36 miles north from Laurel to Broadview, and there it picks up a

FORECAST: MORE POOLING IN THE FUTURE

southbound GN freight. Without this arrangement, "We would require four additional units to perform the service on that line. Great Northern's saving is four unit days," says a GN spokesman.

To balance the arrangement, GN gives Burlington two units each day for service between Sioux City, Iowa, and Pacific Junction, Iowa, and power for Burlington's branch from Sioux City to Ferry, Neb. Burlington's savings is about three unit days. With its WP-SP&S pool, Great Northern uses about 22 units for an operation that would require about 30 without the interchange agreement.

For Southern Pacific it works like this: "We have been able to improve the daily average unit miles in the territory between El Paso and Tucumcari [interchange point with RI] by approximately one-third above what we were getting when power turned at Tucumcari," says an SP spokesman.

Burlington's general superintendent-transportation, E. R. Craven, says: "Better use is made of the equipment because it is running more hours out of each day rather than sitting idle while it waits for the return move."

Other inter-lining benefits cited by these men include improvement of car utilization as well as locomotive use, reduction of per-diem costs, reduction of terminal-delay payments to crews, and general reduction of yard congestion for speeded-up schedules for trains other than the pooled-power ones.

M. A. Dickerson, IC transportation manager, puts it this way: "We use power pooling because it is mutually advantageous. For example, without the power pool with Central of Georgia, we would need four units to handle the 'Seminole' between Chicago and Birmingham, and the Central of Georgia would need two additional units for their portion of the run. With the power pool, the Central of Georgia puts in two units and we provide two, and the units go all the way through between Chicago and Columbus, Ga. This gives us more efficient use of our power and definitely makes for more miles per month."

● **A few problems.** Generally, railroads report smooth operation of pool-power runs. However, there are a few problems such as use of different radio frequencies on the roads in the pool. SP handles it by equipping its locomotives and cabooses with two radios, one set at SP frequency and the other at the frequency of the partner railroad. "Our radios have the other road's train frequency on channel two," says J. N. Albertson, SP general superintendent of communications. "The other road equips their locomotives with our train frequency on channel two. Train crews switch to the appropriate channel, depending on the property they're running over. Radios are removed from service and re-installed by both railroads regardless of radio ownership, when they fail."

Other problems arise from lack of standardized equipment—such as cab signals, identification lights, dynamic brakes, automatic sanders, unit jumper cables, and automatic-train-control devices—as well as from differences in lube oils, water treatment and fueling connections. For example, lack of standard automatic train control meant that former NYC power always had to run in front of foreign power because Central mainline is under automatic control.

Other problems involve mechanical failure that requires foreign power to be run dead back to its own line for repairs. Generally, normal running repairs are handled by all the roads involved, without deadheading to the home-line shops. "There also appear to be a multiplicity of contracts in effect covering the maintenance of foreign units," says a PC spokesman.

Some technical problems

In a recent report, a Locomotive Maintenance Officers Association committee on new developments says, "In some cases, AAR or other standards exist, but railroads go on buying equipment to their personal standards, without regard to the industry as a whole. If such a situation existed in the field of car equipment, we would not be able to interchange cars. If the present trends toward mergers and inter-lining continue, we will have to arrive at standards and may even have to set up standard billing and repair procedures for foreign diesels as is done with car equipment." The procedures of maintenance will have to be expanded to encompass coast-to-coast maintenance needs, the report says.

And the LMOA committee on fuel and lube oil is undertaking the formation of a task group to explore differences between engine builders and railroads, and to define the minimum acceptable lubrication practices for locomotives used in interchange.

"As more railroads become involved in the pooling of power, differences in fuel quality can be indicated in changes in engine output as well as variations in filter life," says T. A. Tennyson, committee chairman and SP manager-maintenance engineer. "The use of lube oils with variation in dispersancy can bring on a variety of problems in engine lubrication as well as filter practice." Tennyson's committee report points to the need for development of an industry-wide lubricating-oil specification along with test procedures to define adequate performance for pooled power.

"This presents a different picture from our original job of developing the type and brand of lube oil to be used over a division or even a railroad, and its oil and filter change schedule," the report says. One problem to be faced will involve changes in engine performance that result from the use of fuels with different characteristics such as BTU per gallon. The specific gravity of fuel can vary from a normal .845 in the central or eastern part of the United States to .882 or even higher in the West. This can cause production of too much horsepower for an engine set up in the East or the loss of horsepower for one set up in the West.

Finally, the LMOA committee on electrical equipment says that a joint examination of such apparatus may be needed so the effect of increasing power interchange on power electrical maintenance can be determined.

● **More pooling to come.** The problems outlined by the LMOA committees will have to be faced soon, if indications of increasing pooling are borne out. Almost every road currently involved in inter-lining indicates that further plans for pooling are being made or that such plans at least are being considered. For example, MP presently is dealing with Louisville & Nashville, Southern, and Rio Grande for development of inter-lining operations this year. And in view of coming changes in former Pennsylvania pools, MP says it may reconsider opening interchange arrangements temporarily suspended with Pennsylvania between Kansas City and Pittsburgh.

Burlington is completing an arrangement with Erie Lackawanna for a joint run between Marion, Ohio, and Kansas City by way of Chicago.

Less specifically, the chief mechanical officer of one major eastern line says, "It is very probable that pooling arrangements with connecting lines will increase." And IC's Dickerson says simply, "We will listen to any useful proposals." He adds, "Our management is interested in anything that will provide better equipment utilization and improved services." ■

How to succeed in business without really buying.

It's easy when you know the right people.

GATX, for example.

We're the tank car professionals.

We've got tank cars that are designed for today's products by today's engineers.

But we don't want you to buy them. Or maintain them.

Just lease them.

That way, you'll be able to keep your cash where it'll do the most good.

In your own business.

And you have all those service and maintenance problems right where you want them, too.

In our lap.

But that's not all you'll get when you lease instead of buy.

You won't have to worry about selling the cars when you're through with them.

And you won't have to worry about keeping records.

That's all included in the lease.

As you can see, success isn't the hardest thing in the world. The fact is when you know the right people, you're golden.

TANK CAR DIVISION

GENERAL AMERICAN TRANSPORTATION CORPORATION, CHICAGO

GATX™

Space contributed as a public service by this magazine.

The United Way serves the needs of all people

as well as people in need.

The United Way helps not only the poor. It helps homeless children . . . the lonesome aged . . . the ill . . . troubled youth . . . members of the Armed Forces and their families . . . disaster victims.

The help is personal and warm because it is provided by people who know your community best — people *in* your community.

Everybody benefits, the United Way.

Your community becomes a better place for all families, including your own, when you give your fair share to your United Fund or Community Chest.

Your fair share gift works many wonders/THE UNITED WAY

27 million families benefit by child care, family service, youth guidance, health programs, disaster relief and services for the Armed Forces from 31,000 United Way agencies.

LETTERS FROM READERS

"Super C"

Beaver Dam, Wis.

To the Editor:

The Santa Fe's new "Super C" train (RA, Jan. 29, p. 22) is something new and different and we wish to extend every good wish for its success in every right way. Mention is made of 18 crew changes and this is not new at all. That averages out to about 123 miles for each crew.

Some of the truck lines operate a two-man rig to the West Coast with sleeper cab. The point is the men go through and alternate drivers. It certainly takes time to make so many crew changes. If the Santa Fe used two crews that went through, only about four 500-mile inspection stops would be needed.

If that were done the train could be operated on a 30-hour schedule and be even more competitive.

R. E. Neitzel
Traffic Manager
Malleable Iron Range Co.

'Impressive Record'

Milwaukee, Wis.

To the Editor:

Enjoyed the story describing how the first "Super C" Chicago to Los Angeles Freight took 3 hours to load, 34-1/2 hours en route, and 1/2 hour to unload —and 18 crew changes to make the trip.

A very impressive record . . . but still some modernizing to do if we have to change crews every two hours.

Wm. K. Walthers
President
Wm. K. Walthers Inc.

Gourmet railroading

Seattle, Wash.

To the Editor:

I like the new format for Railway Age. . . . Since my retirement four years ago from traffic work, I keep abreast of the old game, becoming so new, with only Railway Age keeping me posted.

I have just received from Alco Products their "New Ways to Run Railroads." Your own editorials keep plugging the idea to rail management that they should advertise, "accentuating the positive."

This Alco brochure certainly contains all the ingredients of what is being stirred up in the pot of gourmet railroading being served up on the railroads today.

L. W. Jaeger
Great Northern (Ret.)

"Missing link"

Quebec, Canada

To the Editor:

I am glad to see that you have pointed out the "missing link" in the evolution of couplers in the U.S. (RA, Jan. 15, p. 38). The money that has been wasted, and the deaths and injuries which have occurred, over the years due to the lack of a proper automatic coupler, are fantastic and needless.

In an article entitled "Automatic Couplers in Britain and Europe" published in "Modern Transport" in February 1962, I wrote, "It is apparent that the cost savings in shunting and marshalling would be considerable, especially if the brake hose, beside the draft gear, were coupled automatically. In fact, this is one of the essentials today and both the B.T.C. (British Transport Commission) and the U.I.C. (International Union of Railways) have stipulated that an automatic coupler must include the brake hose. It does not do so in North America, where, despite years of experience with automatic couplers, a man still has to spend time coupling up the brake hose and must go between the cars to do it. . . ."

When the American Roads get around to doing something about this, as I hope they will shortly, they should bear in mind that electrical connections should be incorporated in such a coupler, particularly to operate the electro-pneumatic brake which will have to be used on long trains sooner or later.

G. Richard Parkes

Crossing safety

Ringoes, N.J.

To the Editor:

I think two things could be done right away to improve the grade crossing situation.

One, install regular traffic signals in place of the present flashing lights. These could be activated either by a pressure switch triggering a timer or by an electronic sensor. It should be possible to come up with a package costing less than $1,000 installed. People are used to stopping in the boondocks for traffic lights even when there is no cross traffic, plus they are used to these lights and realize that persons running red lights often get a ticket.

Second, crossings should be classified in some way either by type of sign or by a color so that drivers could be made aware of the more dangerous ones as on main lines where trains operate at high speeds. Trucks and buses should not be required to stop at industrial track crossings where rail traffic is very light and crews normally flag the crossing in any case. If trucks only had to stop at crossings where rail traffic was reasonably heavy and fast I believe we could expect better compliance from the drivers.

Other light traffic crossings could revert to a stop and flag status, or incorporate a rail speed restriction.

Samuel Freeman
General Mgr.
Black River & Western Corp. Railroad

The railroad image

Greenwich, Conn.

To the Editor:

From recent observations and contacts as a Transportation Consultant, a subtle change is occurring in the railroad public image. The chief element seems to be a realization of the broadening base of railway operations embracing land, air and water–special equipment, containers, trailers, tractors, terminals, pipelines, even ships and air cargo. The fact is being publicized that the railroads are in the general transportation business, not for love—but for profit. The shipping public is being made aware of the low basic costs of multi-unit, dependable, fast, all-weather operations over an efficient privately-maintained steelway equipped with modern communication and safety devices. Most important is the willingness of rail management to reflect these advantages in their prices. Railroad market research departments, hand in hand with the traditional salesmen, are beating the bushes for new opportunities and innovation is no longer a dirty word. Important too is the fact that the railroads are now cooperating with other modes of transport instead of fighting with them.

Above all, the railroads have become optimistic about the future—"Can do" and "Wilco". Such philosophy is beginning to impress even the cynics of Wall Street, who have long been bearish on railroad financial opportunities. The security analysts are now looking at many railroads as growth companies and are advising their clients to buy. I'm buying!

Francis C. Tighe
Transportation & Distribution Consultant

People or ore . . .

Monorail or two-rail. We engineer control systems for all kinds of "rail" transportation—mainline, industrial, mining, and rapid transit. Safe, dependable systems—for manual control, for crewless operation, or for any of various stages in between.

Transportation control is our principal business. We concentrate on it.

We'd like an opportunity to study your needs in this field. You'll get our undivided attention.

GENERAL RAILWAY SIGNAL COMPANY

A UNIT OF GENERAL SIGNAL CORPORATION

3437

ROCHESTER NEW YORK 14602

ATLANTA BOSTON CHICAGO MONTREAL NEW YORK OAKLAND ST LOUIS ST PAUL

Circle 8 on reader service coupon

At 130 mph, it goes the 320 miles between Tokyo and Osaka in three hours and 10 minutes, and the way tickets for it sell you'd think it was the Olympic Games.

Is Japan's New Tokaido Line a *genuine* system of rapid transit? Or just the world's fastest railroad? Probably both, if you consider facts like these:

Along the line's scenic miles are nearly one-half of Japan's 100 million people. And her six largest cities. Plus the overwhelming proportion of her major heavy industry.

No matter what you call the New Tokaido Line, Japan needed it.

Sumitomo's interest in this remarkable railroad goes back to the day it was conceived on paper. Then, at the request of the Japanese National Railways, we manufactured the wheel and axle units, the driving gear units, the air springs and automatic couplers.

Today, there isn't a train in Japan that doesn't roll on Sumitomo wheels. Today, our modern Osaka Works is capable of turning out one-third of the world demand for solid rolled wheels. It is, in fact, the world's largest wheelmaking plant. From Sumitomo each year comes thousands of tons of wheels — safe, light, quality wheels in sizes from 550mm to 1,300mm, guaranteed to conform to any National Standard, yours included.

Remember this the next time you set out to build a rapid transit system. Or just a very fast railroad.

SUMITOMO METALS
SUMITOMO METAL INDUSTRIES, LTD., TOKYO, JAPAN

Circle 15 on reader service coupon

New Corridor study is under way

What's the effect of a transport mode on the people along the line? The answer to this question is a major target of a Northeast Corridor study under way at the Transportation Center at Northwestern University. And this makes the study unique, says Dr. John A. Bailey, TC director.

The project represents "a major breakthrough in the study of megalopolis transport alternatives," says Bailey. "For the first time, a major transportation study of a region will be undertaken with a view to providing both urban and transportation planners with computerized predictions of what one transportation alternative or another will mean to an area in terms of impact on those who live there."

• **Computerized model.** Funded by a $200,000 grant from the Department of Transportation (RA, Jan. 15, p.34), the project involves creation of a computerized model of the transportation, social and political factors in the Boston-Washington system. Completion is set for Dec. 31, 1968. Then the findings will go to area transport planners as part of a general systems study being carried out by the Office of High Speed Ground Transportation.

This study will probe future transportation needs and the possible economic and social benefits that specific regions can gain from improved transportation systems.

In this context, the Transportation Center's work will serve as a forerunner for similar efforts in areas beyond the Boston-Washington corridor and will give assistance regarding "alternative systems, investment policies and long-range social impact," according to the TC director.

• **County forms transport bureau.** Just a few miles from the Transportation Center, a possible second model for transport planners was launched recently when Cook County (Chicago) opened a new transportation bureau. Designed to study the "total urban transportation field" of the county, the bureau is part of the highway department. It will provide "long-range planning so that highways of the future are constructed in relation to mass transportation services," says Richard H. Golterman, highway commissioner. ■

LUTHER MILLER

AS THE EDITOR SEES IT

RAILROAD AIR TERMINALS?—Jumbo jets are on the way—but unless something is done, and done quickly, they're going to find themselves all powered up with nowhere to land. Robert E. Dudley, a Seattle-based engineer who is highly regarded in the airport-design field, thinks an answer will be found, and that it may well be the linear airport—as opposed to the traditional radial landing field. "It appears logical," says Dudley, "to consider locating these new airport facilities over or alongside existing rights-of-way. Private railroad companies should consider expanding into the railroad/airline terminal business if not 'total transportation' itself."

THE LINEAR APPROACH—On close examination, Dudley's basic proposal—as outlined a few weeks ago to the Washington State Aeronautics Commission—makes sense. The radial airport (argues Dudley) was fine in its day, providing multi-directional runways around a hub to meet the requirements of comparatively slow aircraft sensitive to wind velocity and direction. But "the cross-wind tolerance of jumbo jets will frequently require only one single bi-directional runway. If four to six miles of reasonably straight and level existing transportation system right-of-way is available, a landing strip, taxiway, and take-off strip in straight production line-order may produce a satisfactory facility."

A LAND-USE PROBLEM—Land is scarce and getting scarcer: "Close-in land areas are becoming as extinct as the Dodo bird." But, says Dudley, "Railroads, highways and rapid transit rights-of-way total to about as many acres of land as the entire acreage of the State of Pennsylvania." So why not utilize these rights of way for long-and-narrow linear airports—with terminal facilities (perhaps 80 feet wide and a mile or two long) dug in two stories below?

TRANSPORT INTEGRATION—The whole idea, far-fetched as it may seem at first glance, is no more far-fetched than the idea of the airplane itself was to railroad men just a few decades ago. The advantage to travelers—and perhaps more importantly, to air-cargo shippers—of having a railroad at jet-tip are obvious. Railroads are anxious to get a piece of the jet-age action—to participate in that "total transportation" picture envisaged by Dudley. Is this a starting point?

Clarence E. Larsen
Burlington

Glenn F. Reynolds
Burlington

Stewart T. Cooke
CN

John T. Ford
C&O-B&O

LeRoy Hurt
C&O-B&O

John J. Ohorodnik
C&O-B&O

PEOPLE IN THE NEWS

ASSOCIATION OF AMERICAN RAILROADS.—Has reshaped its Research Center organization along scientific lines. **Gerald M. Magee,** director of engineering research, Chicago, named assistant vice president—research. **Robert Byrne,** director of mechanical research, appointed research director. Both will work with **William M. Keller,** vice president in charge of the Research Department.

BURLINGTON.—Has reorganized its freight pricing department. **Clarence E. Larsen,** assistant vice president-marketing, will head the new pricing department in addition to supervising industry marketing and market research. **Glenn F. Reynolds,** manager of pricing, named director of pricing, and **Henry P. Marohnich,** director of market research, appointed manager of pricing-Western Trunk Line territory. **Phillip T. Hebert** named senior cost analyst, Chicago. Mr. Hebert was formerly assistant controller, **Illinois Iron & Bolt Co.**

Ralph W. Butler, assistant sales manager, San Francisco, appointed district sales manager, perishable and trailer-container traffic there.

CANADIAN NATIONAL.—**B. J. Binder,** comptroller, Northern Ontario Area, appointed co-ordinator accounting development, Great Lakes Region, Toronto, Ont., succeeding **S. J. Curreri,** appointed comptroller, Toronto Area, replacing **C. J. Parsonson,** promoted.

Stewart T. Cooke, general superintendent of express freight, Atlantic region, named general superintendent of transportation for that region, succeeding **E. Lorne Hewson,** who has joined the **Department of Transport** in Ottawa, as director of policy and research planning. **Peter A. Clarke,** superintendent of express freight, succeeds Mr. Cooke.

C. A. Fugère, manager, marketing development, passenger sales and services, appointed passenger sales manager, St. Lawrence Region, Montreal.

CHESAPEAKE & OHIO—BALTIMORE & OHIO.—**Arthur W. Conley,** general manager—operations, Baltimore, retired after 50 years of service. **T. Earl Johnson,** assistant general manager, Central Region, Pittsburgh, retired after more than 50 years of railroading.

John J. Ohorodnik, superintendent transportation—schedules and classification, Baltimore, promoted to general manager—superintendent, New York Terminal, C&O-B&O, and the **Staten Island Rapid Transit** at Staten Island. He succeeds **Charles E. Heck,** promoted and transferred to Baltimore.

John T. Collinson, assistant general manager—staff, appointed general manager—maintenance on the staff of **C. Vernon Cowan,** vice president for operations for both roads. Mr. Collinson will remain at Baltimore.

J. W. Almond appointed sales representative, merchandise freight traffic department, C&O, Toledo, Ohio.

At Huntington, W. Va.—**J. H. Wallis** appointed director of communications and signal planning, **E. A. Burgin** named superintendent signals, and **P. A. Flanagan** appointed superintendent communications. Mr. Wallis was formerly assistant general superintendent signals and communications. Mr. Burgin was engineer signals and communication and Mr. Flanagan was engineer communications and signals.

B. J. Johnson, assistant chief engineer—maintenance, Huntington, appointed regional assistant chief engineer, Western Region, Cincinnati, succeeding **J. W. Brent,** who replaces Mr. Johnson at Huntington. **J. W. Winger,** assistant chief engineer—staff, appointed assistant chief engineer—planning, with headquarters as before at Huntington.

Bruce G. Lawler, auditor of expenditures, Baltimore, named assistant comptroller. **Robert R. White,** manager of internal audit, succeeds Mr. Lawler.

John T. Ford, comptroller, named assistant vice president and comptroller, with headquarters as before at Baltimore. **LeRoy Hurt,** assistant comptroller, appointed deputy comptroller. In addition to his duties as chief accounting officer, Mr. Ford will have general responsibility for those Finance Department activities, in Baltimore, previously reporting directly to **H. T. Watkins, Jr.,** vice president.

R. L. Hintz appointed assistant to vice president, Cleveland. He will work directly with **H. T. Watkins, Jr.,** vice president, in administering all functions of the Administrative Group.

E. M. Michie, manager pensions and group insurance, C&O, appointed manager personnel—employee benefits, C&O-B&O, Baltimore. **J. C. Thompson** named assistant manager personnel—employee benefits. Messrs. Michie and Thompson will be under jurisdiction of **J. L. Quarles, Jr.,** assistant vice president.

Norman S. Brubeck named assistant manager—iron and steel industry, Baltimore.

L. R. Letteron appointed assistant director—data processing operations, Baltimore. He will be responsible for the operation of the Car Location Information Center and the Transportation Data System.

CLINCHFIELD.—**George W. Guinn, Jr.,** assistant general freight agent, Erwin, Tenn., appointed assistant traffic manager—rates and divisions, succeeding the late **C. S. Belcher.**

DELAWARE & HUDSON.—**Charles A. Beck,** sales representative, appointed assistant division sales manager, Albany, succeeding **G. Howard Ingalls,** who retired Feb. 1 after 48 years with the D&H. **David L. Mare** succeeds Mr. Beck.

Thomas E. O'Brien appointed coal traffic manager, Albany. Abolished position of coal freight agent, formerly held by Mr. O'Brien.

DEPARTMENT OF TRANSPORT — CANADA.—**E. Lorne Hewson,** general superintendent of transportation, Atlantic Region, **Canadian National,** Moncton, N. B., appointed director of policy and research planning, D.O.T.-Canada at Ottawa, Ont.

FRISCO.—**Charles P. Battaile,** general road foreman of equipment, named rules examiner, Springfield, Mo., to succeed **T. D. Wages,** who has retired after more than 45 years' service. **Paul G. Mattingly,** assistant general freight agent, Mobile, Ala., transferred to St. Louis, replacing **J. L. Scales,** who has retired after more than 44 years of service.

LOUISVILLE & NASHVILLE.—**William C. Wagner,** assistant manager-commerce, named manager-commerce, succeeding **Karl E. Bader,** who retired Jan. 31 after more than 44 years of service.

MISSOURI PACIFIC-TEXAS & PACIFIC.—**J. T. De Vore,** terminal manager, **MP** and **Missouri Pacific Truck Lines, Inc.,** Corpus Christi, Tex., named trainmaster-terminal manager, **T&P** and **Texas & Pacific Motor Transport Co.,** El Paso, Tex. **G. N. Craig, Jr.,** assistant district superintendent stations and claim prevention, Gulf District, **MP,** Houston, replaces Mr. De Vore, and in turn is succeeded by **W. T. Farr, Jr.,** transferred from the **T&P,** Fort Worth, Tex. **D. B. Smith** succeeds Mr. Farr. **R. E. Sansom** named district superintendent stations and claim prevention, Western District, **MP,** Kansas City, Mo., to succeed **W. C. Watley, Jr.,** transferred. **J. M. McJannet** appointed trainmaster, **T&P,** Sherman, Tex.

NORTHERN PACIFIC.—**Raymond E. McCourtney,** assistant general freight agent, Minneapolis, advanced to freight traffic manager, Central-Eastern region, with headquarters at St. Paul. Mr. McCourtney, who will be responsible for agencies in 21 states and company offices in nine principal cities, succeeds **L. S. Kiser,** named western traffic manager, Seattle (RA, Jan. 29, p. 40). **K. A. Knutson,** assistant general freight agent, St. Paul, promoted to general freight agent, Minneapolis. Mr. Knutson succeeds Mr. McCourtney in assuming responsibility for traffic sales in the Minneapolis region. He will also be responsible for traffic sales in the metropolitan area including the St. Paul region. **James C. Moore,** commercial agent, St. Paul, advanced to the newly established position of general agent there.

Bruce A. Nelson named associate industrial engineer, Tacoma, Wash.

John T. Collinson
C&O-B&O

E. Lorne Hewson
D.O.T.-Canada

Dayton C. Yeager
Berwick Forge

Richard K. Tobin
Evans

READING.—C. William Pleiss, auditor, general accounts and taxes, appointed assistant general auditor, Philadelphia. **Richard M. Couzens** appointed attorney at Philadelphia, and will work in the area of regulatory law. Mr. Couzens formerly was with the Defenders Association of Philadelphia.

Joseph K. Herman, purchasing agent, Philadelphia, promoted to director of purchases and materials. **Ernest H. Follweiler,** assistant purchasing agent, promoted to purchasing agent and his former title discontinued. **John M. Wetzel,** engineering assistant—purchases and stores, named materials engineer, purchasing and materials and his former position discontinued.

Clyde W. Edwards, passenger trainmaster, Reading Terminal, named assistant superintendent—passenger operations, Philadelphia, succeeding **George F. VanLuvanee,** who retired Dec. 31. **Joseph E. Heilman,** terminal passenger trainmaster, succeeds Mr. Edwards. **William C. Stowell,** assistant passenger trainmaster, succeeds Mr. Heilman.

ROCK ISLAND.—Has expanded its industrial marketing division and named the following marketing managers: **Donald S. Chisholm,** chemicals and petroleum, Chicago; **Lester B. Porter,** metals, Chicago; **John E. Tolin,** food products, Chicago; **Leonard E. Peterson,** automotive and farm implements, Detroit; **J. Ted Wells,** grain and grain products, Kansas City; **James S. Stobie,** forest products, Portland, Ore.

SANTA FE.—E. T. Lucey named construction engineer, Coast Lines, Los Angeles, to succeed **R. A. Stane,** advanced to the newly established Information Systems Department, Topeka, Kans.

TEXAS & PACIFIC.—E. Clark named superintendent of shops, Marshall, Tex., to succeed **W. Combs,** retired.

UNION PACIFIC.—Paul E. Flebbe, engineer of tests, named research and standards engineer in charge of the road's research laboratory at Omaha Shops. **Nick Pritza,** assistant chief dispatcher, Cheyenne, Wyo., appointed assistant to vice president-operations, Omaha.

R. R. Pope, general agent—freight department, Los Angeles, promoted to assistant general freight agent there. **Edward J. Murphy,** general traffic agent, San Pedro, Cal., succeeds Mr. Pope at Los Angeles. **Donald A. Shum,** traffic agent, Los Angeles, succeeds Mr. Murphy. **Robert S. Olsen** named general traffic agent at Detroit, succeeding **Frederick O. Kansorka,** retired.

Charles F. Hallsman, assistant general passenger agent, Los Angeles, retired Dec. 31, after more than 45 years of service.

The UP has created four positions with the title of district manager of trailer traffic. Named to the new positions are **Francis M. Baird,** who will be responsible for the territory of Oregon, Washington, Montana, and Idaho, west and north of Pocatello, with headquarters at Portland, Ore.; **Nicholaus J. Friedrichsen,** who will have the territory east of Pocatello, Ida., Wyoming, Utah, Colorado, Kansas and Nebraska, with headquarters at Denver; **Donald R. Petersen,** who will have headquarters at Chicago and be responsible for Minnesota, Illinois, Missouri, Wisconsin and east; **Scott L. Smith,** who will have the California and Nevada territory, with headquarters at Los Angeles.

XTRA, INC.—R. E. Keiran, vice president-sales, elected president and chief operating officer, to succeed **John F. Prendiville,** who will continue as chairman and chief executive officer. **William L. Sarakenoff** replaces Mr. Keiran. **Charles Kaye** named house counsel.

SUPPLY TRADE

Dayton C. Yeager has been appointed general sales manager, **Berwick Forge & Fabricating Corp.,** Berwick, Pa. He will report to **Walter F. Vorbleski,** vice president—sales. Mr. Yeager previously served as sales engineer, Wine Railway Appliance Division, Unitcast Corp.

Richard K. Tobin has been appointed assistant vice president, **Industrial Division, Evans Products Co.** He was director of sales of the division.

Ralph E. Sexton has been named general manager, **Terminal Services Division, North American Car Corp.** He was formerly general sales manager of the terminal division.

D. M. Young has been appointed mechanical assistant to vice president-sales, **American Steel Foundries,** Chicago, to succeed **Walter Moryto,** retired. Mr. Young's successor as manager service engineering, Chicago, is **R. J. Prindle,** service engineer.

Howard Kunkle, field sales engineer, **Thermo King Corp.,** has been named assistant sales manager, railroad division, with headquarters as before at Chicago.

Peter H. Gardner has been named sales manager for specialized products, Industrial Products Department, Technical Products Division, **Corning Glass Works,** Corning, N.Y. He will serve customers in the transportation industry, including special rail, marine and automotive applications.

Jackson Vibrators, Inc. has appointed **John L. Beven** regional sales manager for the Eastern half of the United States, with headquarters at Fredericksburg, Va. With the appointment of Mr. Beven, who was formerly associated with **Unit Rail Anchor Co.,** territories in the Eastern half of the U.S. have been rearranged with sales engineers **Otis W. Kays** at Atlanta, Ga., **Lyle W. Drummond** at Somerville, N.J., and **Vint R. Neel, Jr.,** at Columbus, Ohio.

Ross L. Thorfinnson, vice president for transportation and administration, **Archer Daniels Midland Co.,** has been named vice president for administration and operations, National Car Rental System, Inc., of Edina, Minn. He will continue to serve ADM as transportation attorney. Mr. Thorfinnson spent 18½ years with the **Soo Line** as general attorney in charge of commerce and vice president—traffic.

Jack Terry has been named manager of sales, **Rail Car Division, Maxson Corp.,** formerly **St. Paul Foundry & Manufacturing Co.** Mr. Terry, who was previously district sales manager, **MacLean-Fogg Lock Nut Co.,** Chicago, will have headquarters at St. Paul.

Donald B. Romans, assistant treasurer, **Union Tank Car Co.,** has been elected treasurer, to succeed **T. P. O'Boyle,** who becomes vice president-administration.

DIVIDENDS DECLARED

CANADIAN PACIFIC.—$1.45, semiannual, paid Feb. 1 to holders of record Dec. 22.

CAROLINA, CLINCHFIELD & OHIO.—Guaranteed, $1.25, quarterly, paid Jan. 16 to holders of record Jan. 3.

CHICAGO GREAT WESTERN.—5% Preferred, 62½¢, quarterly, paid Dec. 29 to holders of record Dec. 26.

CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC.—Preferred, $1.25, quarterly, payable March 27, June 20, Sept. 19 and Dec. 19 to holders of record March 8, May 31, Aug. 30 and Nov. 29, respectively.

DENVER & RIO GRANDE WESTERN. — 27½¢ quarterly, payable March 18 to holders of record March 1.

ERIE & PITTSBURGH.—Guaranteed, 87½¢ quarterly, paid Dec. 11 to holders of record Nov. 30.

GREAT NORTHERN.—common, 75¢, quarterly, paid Feb. 1 to holders of record Jan. 12.

GULF, MOBILE & OHIO.—65¢, quarterly; $1 year-end, both paid Dec. 11 to holders of record Nov. 21; Preferred, $1.25, quarterly, payable June 10, 1968, to holders of record May 22; 65¢, quarterly, payable March 11 to holders of record Feb. 20; $5 Preferred, $1.25, Q, payable Sept. 9 to holders of record Aug. 21.

LOUISVILLE & NASHVILLE.—$1, quarterly, payable March 14 to holders of record Feb. 1.

MAHONING COAL.—Preferred, 2½%, semiannual, paid Jan. 1, to holders of record Dec. 26; common, $15; $10, extra, paid Dec. 29 to holders of record Dec. 26.

MISSOURI PACIFIC.—Class A, $1.25; Class B, $5, both paid Dec. 28 to holders of record Dec. 15.

NORFOLK & WESTERN.—$1.50, quarterly, payable March 11 to holders of record Feb. 8.

NORTHERN PACIFIC.—65¢, quarterly, payable April 30 to holders of record April 9.

PITTSBURGH & LAKE ERIE.—$1.50, quarterly; $1, extra, paid Jan. 15 to holders of record Dec. 29.

PITTSBURGH & WEST VIRGINIA.—4½¢, monthly, payable Jan. 31, Feb. 29 and March 29 to holders of record Jan. 15, Feb. 15 and March 15, respectively.

PITTSBURGH, FORT WAYNE & CHICAGO.—7% Preferred, $1.75, quarterly, paid Jan. 2, to holders of record Dec. 8, 1967.

SEABOARD COAST LINE. — 55¢, quarterly, payable March 14 to holders of record Feb. 22.

SOUTHERN.—70¢, quarterly, payable March 15 to holders of record Feb. 15; 5% Preferred, 25¢, quarterly, payable March 15, June 14 and Sept. 13 to holders of record Feb. 15, May 15 and Aug. 15, respectively.

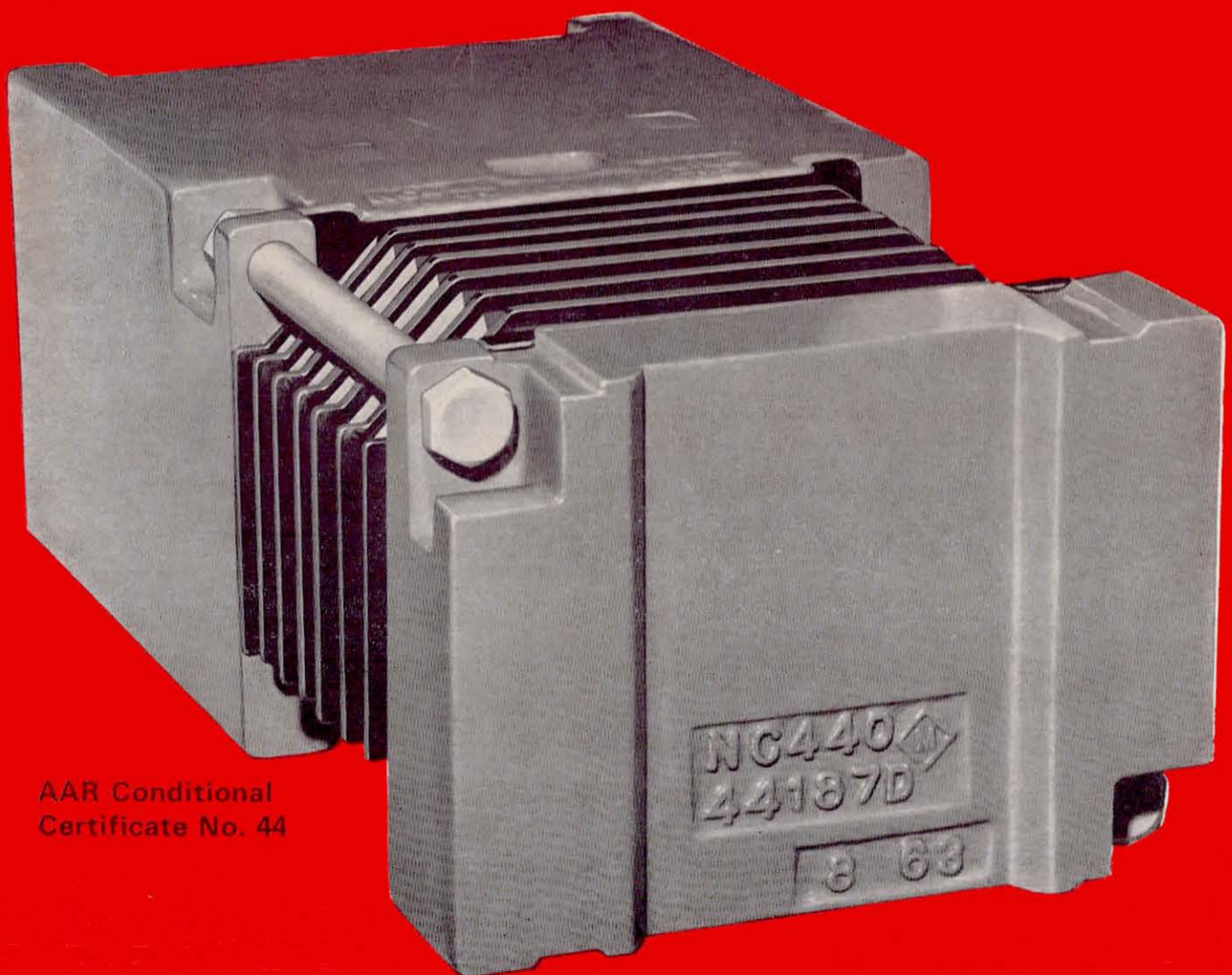
SOUTHERN PACIFIC.—40¢, quarterly, payable March 18 to holders of record Feb. 23.

UNION PACIFIC. — 50¢, quarterly, increased, paid Jan. 2 to holders of record Dec. 11.

WESTERN PACIFIC.—55¢, quarterly, paid Feb. 15 to holders of record Feb. 1.

TOMORROW'S CAR PROTECTION IS AVAILABLE FROM NATIONAL TODAY

National NC·440 is the only AAR Specification M·901·E rubber gear with full cushioning capacity



AAR Conditional
Certificate No. 44

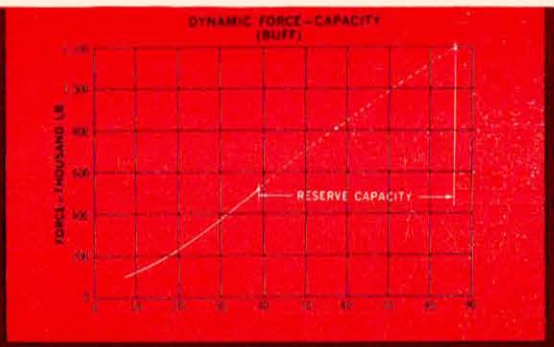
Over 10 years of intensive R & D, and literally hundreds of test track impacts at National's Technical Center, have culminated in the development of the National NC-440 Rubber Gear. Available today, NC-440 has been dubbed the gear of tomorrow. Because of its huge cushioning power and reserve capacity it never goes solid . . . cushions all the way . . . always provides full cushioning . . . protects car structures at higher impacting speeds. National's unique knowledge of and experience in the draft gear field is some of the technical fallout of our many-pronged attack on high railroad operational costs. In so many areas of railroading — *Tomorrow is Taking Shape at National Today.*

BUFF

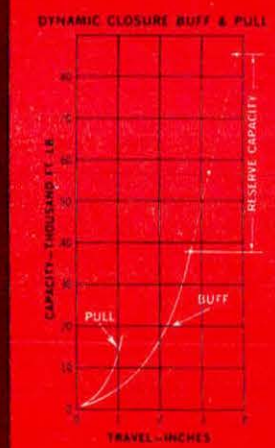
Force (lbs.)	Capacity (ft.-lbs.)	Travel (inches)
88,000	6,400	1.31
511,000	37,500	2.84 (AAR Rating Travel)
806,000	56,400	3.25 (AAR Max. Travel)
1,200,000	85,000	3.90 (Full Capacity)

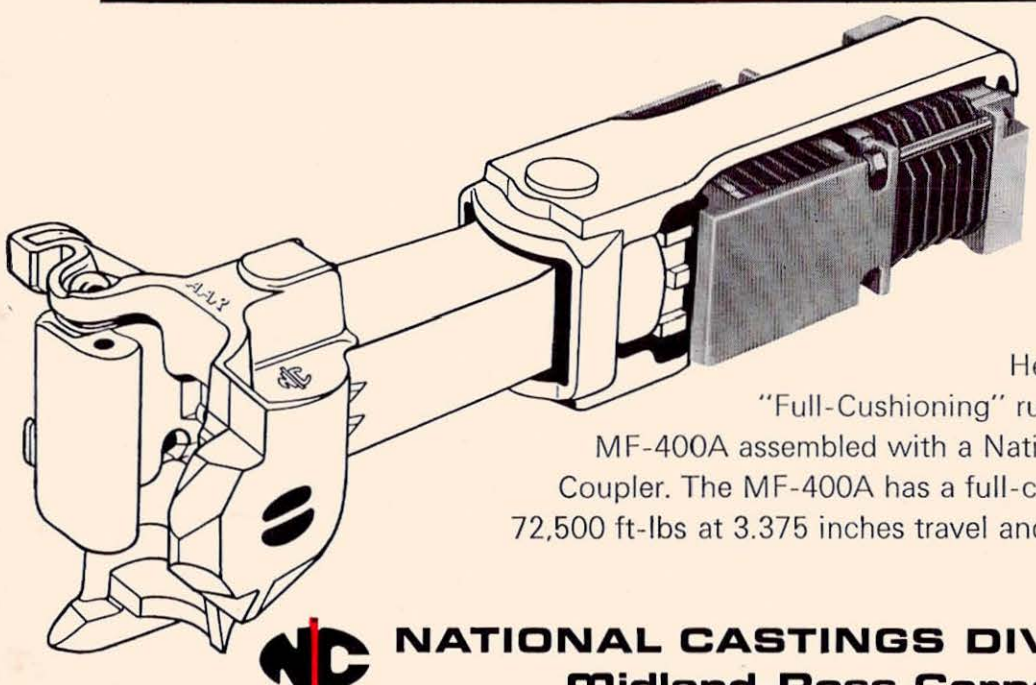
PULL

517,000	18,100	1.17



Data at 511,000 pounds to 2.84 inches travel and 806,000 pounds to 3.25 inches travel both in buff, and data at 517,000 pounds to 1.17 inches travel in pull obtained by AAR in certification test of Type NC-440 gear in accordance with Specification M-901-E. Average results of test on five gears shown.





Here's another National "Full-Cushioning" rubber draft gear — the MF-400A assembled with a National AAR Standard F Coupler. The MF-400A has a full-cushioning capacity of 72,500 ft-lbs at 3.375 inches travel and 1,237,000 lbs force.

NATIONAL CASTINGS DIVISION
Midland-Ross Corporation

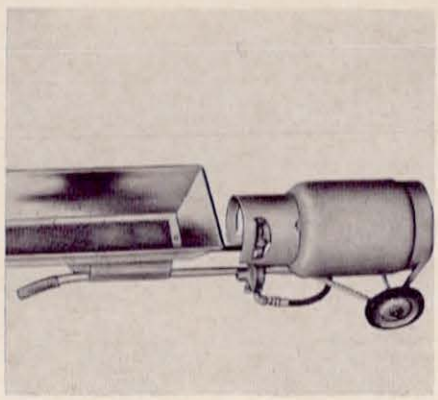
10600 QUINCY AVENUE • CLEVELAND, OHIO 44106

Circle 14 on reader service coupon

NEW PRODUCTS REPORT

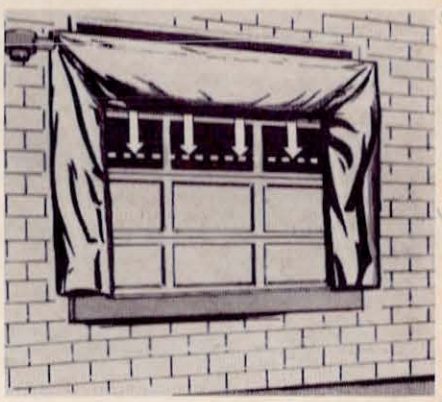
Tank scrubber (RA-1)

With vertical nozzle rotation and unit rotation, each of 360 deg, the Tigar Cub tank scrubber will clean any shape tank up to 40 ft during its normal complete cleaning cycle of 20 min. Interchangeable turbines permit a 12-min cleaning cycle. The 17-lb unit is fluid driven and operates at pumping pressures from 20 to 200 psi, hot or cold, and at capacities of 1,500 to 6,000 gph in the same unit. Five nozzle orifices ae available from 0.8 to 5/16 in. *Vicjet.*



Dock heaters (RA-2)

The present line of Copperloy portable infrared dock heaters for use on open docks, loading platforms and vehicles can be connected to any propane tank. They are said to light instantly, provide instant heat, and maintain comfortable working conditions in foul weather. Radiant elements are made of inconel grids. The four models—CC50P, CC50S, CC25P, and CC25S—consume 2.3, 2.3, 1.2 and 1.2 lb/hr LP gas, respectively. *Copperloy Corporation.*



Dock enclosure (RA-3)

The hand-operated Model VH (variable height) enclosure of neoprene-coated nylon inflates with low-volume air pressure, forming a tight seal between truck and loading dock. It can be used in same manner as a standard truck dock seal for handling regulation semi-trailers, or its top lowered about 12 in. for sealing off smaller vehicles. A weatherproof blower, mounted inside or outside building, supplies air to the seal. *O'Neal Tarpaulin Co.*

Microwave system (RA-4)

The MW-308D is a 1-watt remodulating microwave radio system operating in the 6.575 to 6.875-GHz frequency band, with full baseband access available at all repeaters. Typical performance for 600-channel loading meets CCIR and AAR long-haul transmission recommendations, and readily exceeds these objectives for 300-channel loading. The equipment is available in nonstandby, hot-standby, and space diversity configuration. Optimum system reliability in space diversity applications is achieved by solid-state circuitry (except for transmitter klystrons), higher fade margin capability, ratio-squared diversity combining of receivers, high speed transmitter diode switching, crystal-controlled transmitters and receivers, and a subsystem concept of self-contained individual powering of each transmitter, receiver, and ancillary equipment. Coupling subsystems provide amplification, impedance matching and baseband isolation for terminal and repeater drop and insertion requirements for multiplex test tone receive levels up to −10dBm and transmit levels as low as −50 dBM. *Collins Radio Co.*

Three-axle truck (RA-5)

Improved performance of locomotives of 3,000 hp and over is said to be attained with the Hi-Ad three-axle, three-motor truck, the equal axle loadings of which are produced by a suspension system which features soft primary springing over each wheel and a stiff secondary suspension of four metalastic-type rubber elements on each of the trucks which support the locomotive body. Snubbing through vertical, horizontal, and rotational shock absorbers greatly reduces wheel bounce. *Montreal Locomotive Works.*

RAILWAY AGE
THE TRANSPORTATION WEEKLY

30 Church Street, N.Y., N.Y. 10007 READERS' SERVICE (Att. George Johnson)

PLEASE SEND ADDITIONAL INFORMATION ABOUT PRODUCTS IN ADVERTISEMENTS NUMBERED: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

PLEASE SEND INFORMATION ABOUT PRODUCTS DESCRIBED ON PAGE 36 MARKED RA-1 RA-2 RA-3 RA-4 RA-5

NAME ..... TITLE.....

COMPANY .....

ADDRESS .....

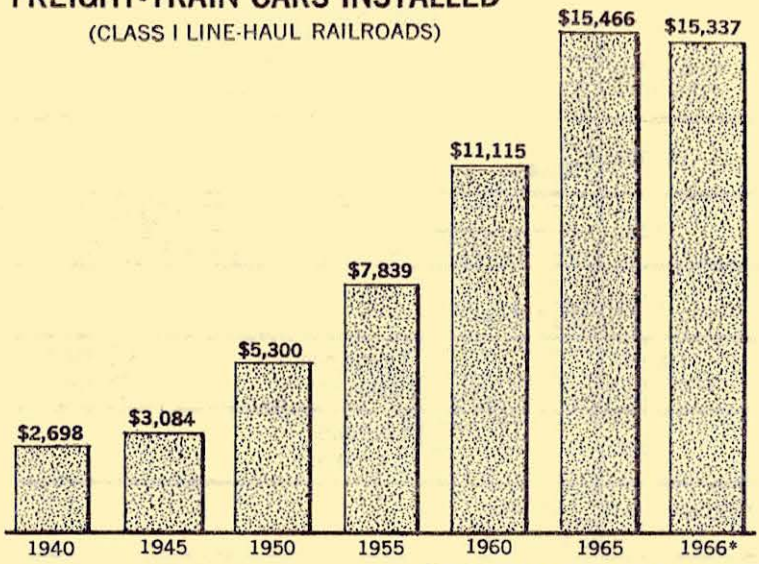
CITY ..... STATE ..... ZIP .....

2/19/68

• Inquiries can be processed only if title and company are shown.

AVERAGE COST OF NEW FREIGHT-TRAIN CARS INSTALLED

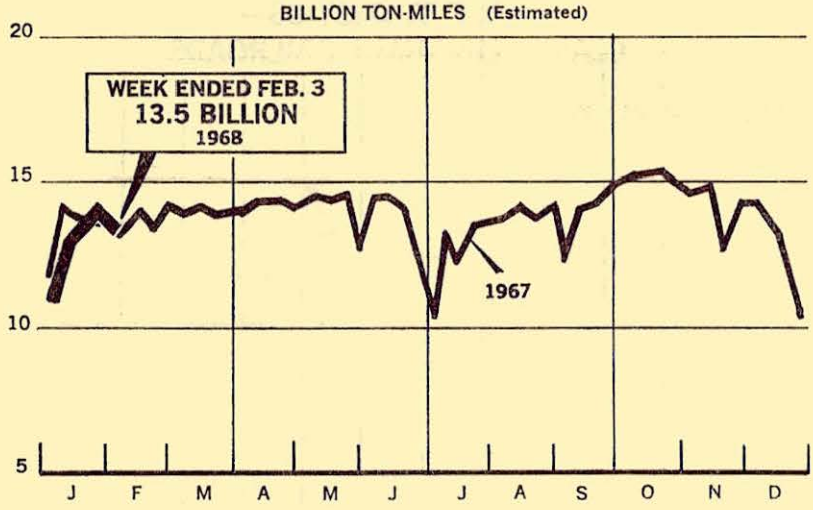
(CLASS I LINE-HAUL RAILROADS)



*Preliminary. Source: latest ICC figures.

RAIL FREIGHT TRAFFIC TRENDS

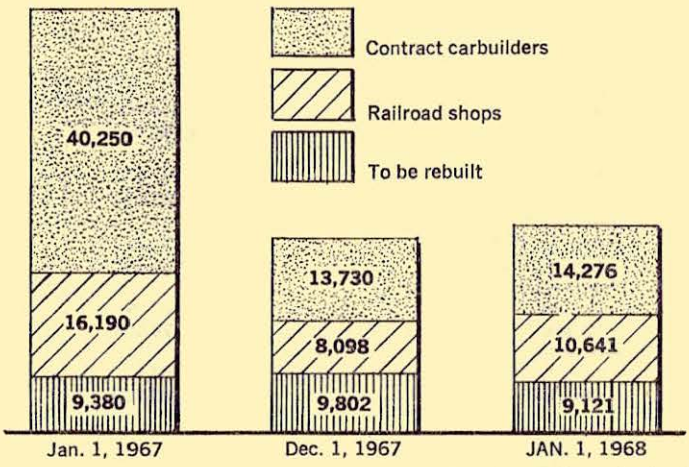
BILLION TON-MILES (Estimated)



Source: Association of American Railroads

FREIGHT CARS ON ORDER

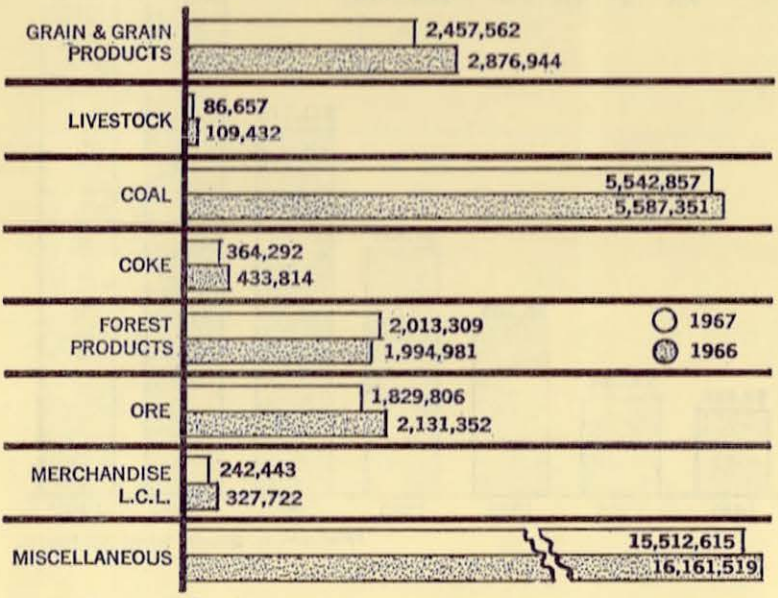
(All railroads and private car lines)



Source: American Railway Car Institute.

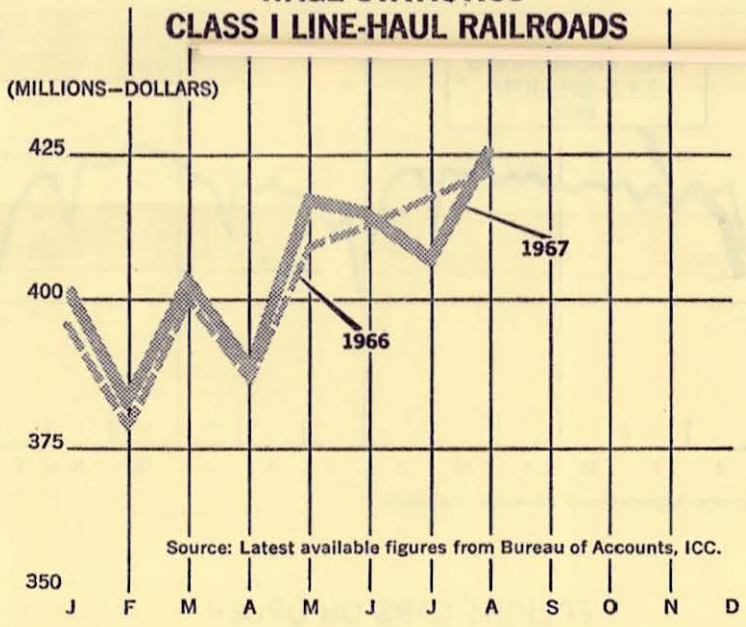
CARS OF REVENUE FREIGHT LOADED BY COMMODITY

1967-1966



Source: Car Service Div., AAR

WAGE STATISTICS— CLASS I LINE-HAUL RAILROADS



Source: Latest available figures from Bureau of Accounts, ICC.

Current statistics

Net Income	
9 mos., 1967	$342,200,000
9 mos., 1966	659,900,000
Carloadings, revenue freight	
6 wks., 1968	2,941,572
6 wks., 1967	3,068,378
New freight cars on order	
Jan. 1, 1968	24,917
Jan. 1, 1967	56,440
New freight cars delivered	
12 mos., 1967	83,099
12 mos., 1966	90,104
Serviceable cars	
Jan. 1, 1968	1,405,832
Jan. 1, 1967	1,425,203

MARKET OUTLOOK

Carloadings

Loadings of revenue freight in the week ended Feb. 10 totaled 504,136 cars, the Association of American Railroads announced on Feb. 15. This was an increase of 1,771 cars, or 0.4%, compared with the previous week; an increase of 4,448 cars, or 0.9%, compared with the corresponding week last year; and a decrease of 30,214 cars, or 5.7%, compared with the equivalent 1966 week. Ton-miles generated by carloadings in the week ended Feb. 10 are estimated at 13.5 billion, an increase of 2.4% above the corresponding week of 1967, and 0.5% below the 1966 week.

REVENUE FREIGHT CARLOADINGS
For the week ened Saturday, Feb. 10

District	1968	1967	1966
Eastern, including Allegheny and Pocahontas ..	206,740	192,010	215,684
Southern	108,095	109,542	113,439
Total Eastern and Southern Districts	314,835	301,552	329,123
Northwestern .	56,570	56,479	60,448
Central Western	104,862	103,889	105,876
Southwestern .	27,869	37,768	38,903
Total Western Districts	189,301	198,136	205,227
Total All Roads	504,136	499,688	534,250
Commodities:			
Grain and Grain Products	47,397	48,957	56,407
Livestock	1,027	1,121	1,438
Coal	104,042	105,173	106,351
Coke	8,747	7,480	9,061
Forest Products	38,012	37,287	38,646
Ore	15,033	16,840	16,908
Merchandise l.c.l.	3,884	5,021	6,872
Miscellaneous .	285,994	277,809	298,667
Feb. 10	504,136	499,688	534,250
Feb. 3	502,365	519,703	487,617
Jan. 27	526,775	526,784	513,503
Jan. 20	503,569	528,324	536,387
Jan. 13	487,464	542,304	544,556
Cumulative total, 6 weeks	2,941,572	3,068,378	3,124,695
Estimated revenue ton-miles (billions) 6 weeks	78.6	80.1	79.5

PIGGYBACK CARLOADINGS.—U.S. piggyback loading for the week ended Feb. 3 totaled 25,188 cars, carrying 40,993 trailers, compared with 21,138 cars, carrying 34,881 trailers, in the corresponding 1967 week. Loadings for 1968 up to Feb. 3 totaled 113,977 cars, carrying 187,143 trailers, compared with 104,282 cars, carrying 167,603 trailers, in the corresponding period of 1967.

IN CANADA—Carloadings for the seven-day period ended Jan. 21 totaled 65,310 cars, compared with 61,318 for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada		
Jan. 21, 1968	65,310	22,378
Jan. 21, 1967	70,984	24,249
Cumulative Totals		
Jan. 21, 1968	176,361	61,473
Jan. 21, 1967	205,081	68,919

FREIGHT TRAIN CARS

• *Burlington.*—Ordered 200 Center Flow dry-bulk-commodity covered hopper cars from ACF. The 53-ft, 4,600-cu-ft-capacity cars will have continuous loading hatches, three 13-by-42-inch gravity outlets and 100-ton roller-bearing trucks.

• *Evans Products.*—The Building Products Division of Evans Products Co., which recently took delivery of 100 specially-equipped box cars from the United States Railway Leasing Co., has increased the lease order by an additional 100 cars. The new 50-ft, 70-ton insulated boxes will be equipped with Hydra-Cushion underframes and Superior double-plug car doors. Seventy-five of the cars will be equipped with Evans' new Air-Pak pneumatic bulkhead. The remainder will be equipped with Evans' DF-B bulkheads and adjustable sidewall fillers. Delivery will be completed in April. United States Railway Leasing Co., a lessor of freight cars and equipment, is part of Evans' Transportation Equipment Group.

• *Pacific Fruit Express.*—Ordered 400 new 70-ton, 4,000-cu-ft-capacity mechanical refrigerator cars from Pacific Car & Foundry. Completion of the order in late May will expand PFE's fleet of multi-purpose mechanical reefers to 9,600. Cars will have 9-ft wide door openings; fiberglass reinforced plastic liners; interior load dividers; and cushion underframes.

PIGGYBACK

• *Trailer Train.*—Ordered an additional 150 89-ft standard level cars—75 from ACF and 75 from Bethlehem. This brings TTX purchases since Jan. 1 to 655. As of Feb. 7, Trailer Train had 43,762 cars in service or on order.

NEW FACILITIES

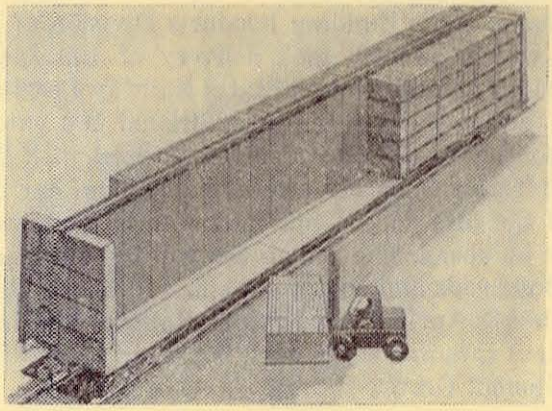
• *Cleveland Transit System.*—Awarded a $134,500 contract to the Railroad Construction Co. for track alignment along its entire right of way. Work begins with spring.

• *Illinois Central.*—Will build a 1,433-car classification yard on 100 acres purchased for $5 million at Cedars, Miss., south of Vicksburg. Set for completion by the end of 1969, the yard will handle an expected traffic increase from industrial development in the Vicksburg area.

• *Louisville & Nashville.*—Ordered 50 sets of 3R54C radio communication equipment from the Signals & Communications Division of WABCO for installation on 50 new cabooses.

• *Pennsylvania-Reading Seashore Lines.*—Placed an order with RCA for solid-state Super-Fleetfone mobile radios to be installed on 32 locomotives, six Budd cars, and 30 trucks and other vehicles. The new communications system will be controlled from 14 base stations. Base station equipment will be REC 30-watt Super-Controlfones.

YOU OUGHT TO KNOW



Thrall offers a new bulkhead car

A new bulkhead flat car has just been introduced. It is capable of hauling 100 tons of such commodities as lumber, pipe, gypsum, steel and containerized lading. The car features high bulkheads and a center beam comparable to the center sill in a conventional car. The center beam is the principal load-carrying member. It is exceptionally deep, which permits a significantly lighter car structure. Called the "Center-Beam Car," it provides 66-ft. loading space between 11-in.-high bulkheads. Lightweight is approximately 62,000 lb., which allows room and capacity for a full 100 tons of lading. Thrall says construction economies of the new car, plus its greater load-carrying capacity, results in a lower initial investment per car.

Truck tonnage rises 1.4% for the week

Intercity truck tonnage in the week ended Feb. 3 was 1.4% above that of the previous week, and 3.6% above the volume in the corresponding week of 1967, according to American Trucking Associations. The report reflects tonnage hauled at some 400 truck terminals of Class I and II motor common carriers of general freight throughout the country.

Top men quit Short Lines Association

Carroll P. Burks has resigned as president of the American Short Line Railroad Association, and James I. Collier, Jr., has resigned as the Association's vice president, general counsel and secretary-treasurer. The Executive Committee of the Association's Board of Directors was in Washington last week, interviewing applicants for the positions. Burks had been president since Nov. 1, 1964, having come from the Tacoma (Wash.) Municipal Belt Line of which he was general manager. At ASLRRA, he succeeded Donald L. Manion, who resigned to accept a Missouri Pacific vice presidency. Manion is now executive vice president of the Chicago & Eastern Illinois, a MoPac subsidiary. Collier came to ASLRRA in September 1963 as successor to William J. Hickey, who resigned to join a Washington law firm.

Rail movement of strawberries gets a boost

California strawberry growers have longed for the day when they'd be shipping the highly-perishable fruit by rail, in mechanical refrigerator cars. They ran tests last summer—and a new report from the U.S. Department of Agriculture seems to indicate that the growers are on the right track. In cross-country shipments, USDA says, the berries arrived without excessive damage—and on a condition-at-destination basis, rail shipment compares favorably with air or rail-express shipment. The test report covers all aspects of the movement, including temperature control, packaging, mixed loading and bracing (RA, Nov. 27, 1967, p.54).

Signalmen stake a claim on ACI work

The International Brotherhood of Electrical Workers has served Section 6 notices demanding assignment of ACI-system work to IBEW people (RA, Jan. 15, p.11)—but the Brotherhood of Railroad Signalmen is taking the position that the work already belongs to its members. In letters now going out from BRS general chairmen, the union contends that ACI "is an enlargement of the principle found in a CTC system and other related signal systems, and work in connection therewith should properly be assigned to signal forces."

RAILWAY BOOKSHELF

That biennial phenomenon known as "Jane's World Railways" (Sampson Low, Marston & Co., Potter Row, Great Missenden, Bucks., England; 8 pounds, 8 shillings, or approximately $20) is just off the presses in its 1967-1968 edition. As usual, it's a whopper. It weighs in at 5 pounds, 10 ounces. It has 515 editorial pages, plus index and foreword (41 more pages than the last edition); 764 illustrations, of which 78% are new; 174 maps, of which 45% are either new or have been revised for this edition; 169 loading gauge diagrams (11% new). It covers 1,448 individual railways in 54 countries. All railways around the world are not as precise or as prompt in compiling statistics as are those in, for example, the United States; so there are, necessarily, gaps, both in substance and in time. Still, this is the most complete compilation of information on world railways available anywhere and is (or ought to be) a must addition to the bookshelf of any railfan—or more to the point, any supplier interested in doing business with these railways.

•

The 10th edition of "Jane's World Railways" includes two new sections: one on Containers and Container Handling and one on Trans-Europ-Express trains. There are also special sections on rapid-transit underground and surface railways (covering 60 city systems in 23 countries); diesel engines (52 manufacturers in 14 countries); track maintenance equipment (29 manufacturers in 7 countries); signalling equipment (21 manufacturers in 13 countries). Fifty-nine manufacturers in eight countries are included in the new section on containers.

•

New maps in the 1967-1968 edition include double-page detailed drawings of the networks in Australia, the United States, and the Soviet Union.

Current events are assessed for their importance to railways. It's pointed out, for example, that the closing of the Suez Canal may have helped to open a new, fast, container freight service from Europe to Japan via the Trans-Siberian railway. Also explored are the possibilities of using North America as a land bridge for container freight moving between Europe and the Far East. The Jean Bertin "Aerotrain"—employing the air-cushion principle—is fully described.

•

But the real value of this reference work is the painstaking collection of statistical data it provides. Some sample items:

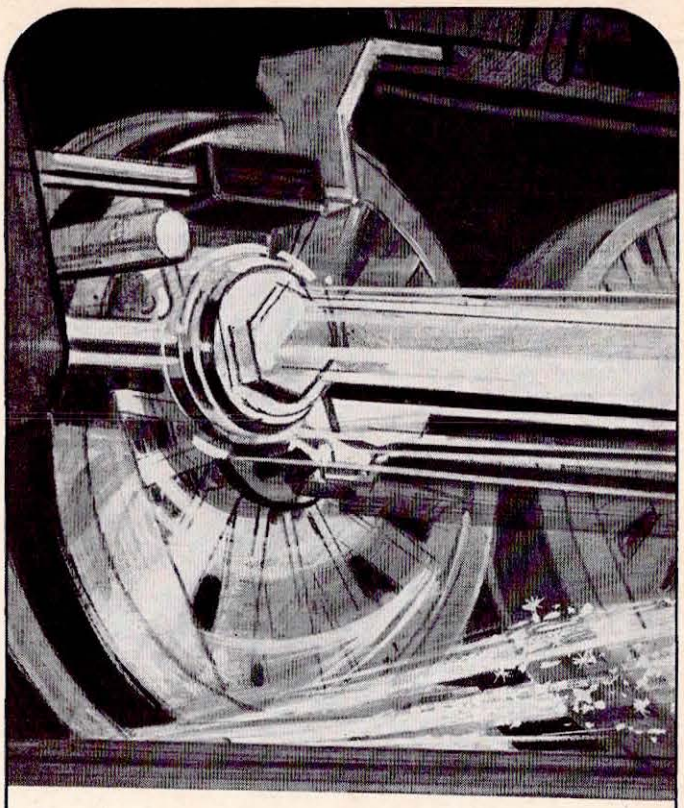
Electrification in the Soviet Union is being expanded at the rate of 1,250 miles a year.

British Railways operated at a loss of 135 million pounds in 1966, slightly less than in 1965 but still worrisome enough to give a boost to a new Transport Bill that would transfer freight from highways to the railway.

French Railways in 1967 hauled only 46.7% of the national freight package—down 2.8% from 1965. Pipelines are a big railway competitor in France.

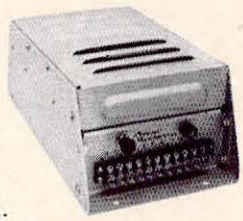
In short: A recommended buy at roughly 23 cents an ounce.

—L.S.M.



stops slipping starts gripping

Summit Locomotive Electronic Wheel Slip Control System from Barco



When locomotive wheels start to slip, the Barco-Summit Electronic Wheel Slip Control takes over instantly. Using the Rate-Of-Change principle the control reduces power in a split second. Besides eliminating wheel and rail damage, the Wheel Slip Control allows longer trains to be pulled with the same power. Available for both AC & DC locomotives. Can be installed in the field on older locomotives.

The Barco-Summit Locomotive Wheel Slip Control System is ruggedly designed and its performance is proved. There's no interference with normal locomotive function and locomotive electrical circuits remain unaltered. For more information on this system, just write Aeroquip Corporation, Barco Division, 500 Hough St., Barrington, Ill.

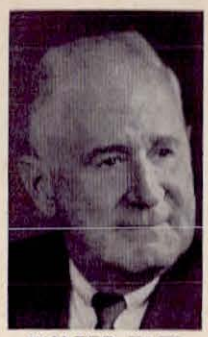
Aeroquip products are protected by patents internationally.

BARCO

Aeroquip

BARCO DIVISION

Circle 12 on reader service coupon



WALTER TAFT

WATCHING WASHINGTON

FAST LEGISLATING—The labor-management agreement to liberalize benefits of the Railroad Retirement and Unemployment Insurance systems has been implemented by legislation which took only a month to enact. Congress, which convened Jan. 15, cleared the legislation by Jan. 30. And President Johnson signed it into law last week. So, it has been proved again that a labor-management pact is a most effective expediter of law-making. Both the House and Senate passed the agreed-on bill unanimously.

TAX INCREASE—The agreement was reached last year as Congress was passing legislation to increase taxes and liberalize benefits of the general Social Security System. Because of the Railroad Retirement Act's tie-in with the Social Security Act, that legislation raised the maximum taxable payroll of railroaders from $550 per month to $650. Meanwhile, a 0.25% increase in the payroll tax rate also became effective Jan. 1. Both hikes will cost railroads and their employees each about $47 million a year. The monthly payment of employees on the maximum level will increase more than $10—to $57.85, from $47.58.

RETIREMENT BENEFITS—The increase in the taxable-income base, of course, will raise prospective retirement annuities of railroaders still employed, the amount of creditable compensation being a factor in calculations of the annuities. The principal immediate effects of the Social Security legislation on railroad annuitants, however, were automatic increases in spouse annuities and in payments to beneficiaries of the so-called special guaranty. The latter assures retired railroaders of not less than 110% of what they would have got under the Social Security System. Annuities of most retired railroaders are above this special-guaranty level—so, the agreed-on liberalization of the Retirement Act applies to them. It provides for increasing their annuities by $1.10 for each $1 increase which the earlier legislation gave comparable Social Security annuitants. Chairman Howard Habermeyer of the Railroad Retirement Board has put the long-range actuarial cost of these new benefits at about $62 million a year.

UNEMPLOYMENT BENEFITS—The agreed-on act's liberalization of unemployment benefits will raise the maximum daily payment to $12.70, from $10.20. The cost will be about $21 million a year. Taxes supporting this system are paid entirely by the railroads. They will not increase.

Freight and Passenger Car Charts

These charts are very helpful to AAR billing clerks, mechanical engineers, purchasing and stores personnel, car inspectors, write-up men, car foremen, and anyone else who needs a knowledge of car parts and their relation to each other.

The charts include a cutaway diagram of the car and a listing of important parts with arrows showing where each is located. These charts are a part of standard training programs used on a number of major railroads.

$2 each

$10 for any six

If you are not satisfied

YOUR MONEY WILL BE REFUNDED

if you return the charts to us within 30 days

THE RAILWAY EDUCATIONAL BUREAU
1809 CAPITOL AVENUE
OMAHA 2, NEBRASKA

Please send the charts I have checked below. If I am not satisfied I will return the charts within 30 days for a full refund. I enclose a check or money order for $2.00 for each chart or $10.00 for any six charts.

- ☐ Streamlined light weight passenger car (16x25 inches)
- ☐ Covered hopper car (20x30 inches)
- ☐ Box car, AAR standard 40 ft. (23x25 inches)
- ☐ Air conditioned chair car, 1930 design (18x35 inches)
- ☐ Tank Car (22x35 inches)
- ☐ Refrigerator Car, wood sheathed, steel underframe, 1920 design (14x20 inches)

2/19/68

Name _____

Address _____

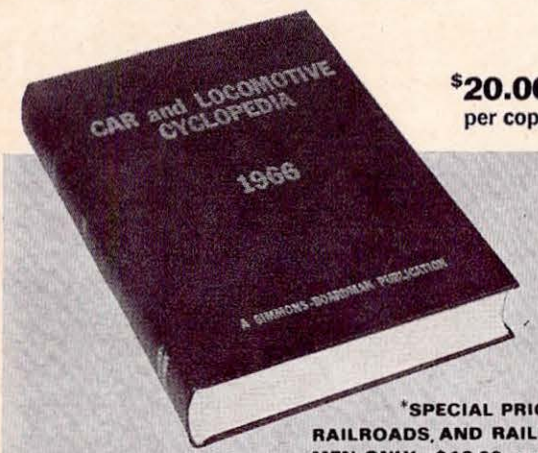
City _____ State _____

_____ RR _____

For the first time... it's a reference book for

BOTH CARS AND LOCOMOTIVES

1,200 pages of detailed information, drawings and dimensions, includes all pages that would have appeared in the 22nd Edition, Car Builders' Cyclopedia PLUS 250 pages covering specifications and details of locomotives.



$20.00 per copy*

***SPECIAL PRICE TO RAILROADS, AND RAILROAD MEN ONLY—$12.00 per copy.**

ORDER FROM CYCLOPEDIA DEPT., SIMMONS-BOARDMAN PUBLISHING CORPORATION, 30 CHURCH ST., NEW YORK, N.Y. 10007

Hayes **Derails**

Hayes **Bumping Posts**

Hayes **Wheel Stops**

Choice of railroad M W men since 1903

Hayes Track Appliance Co. Richmond, Indiana 47374

Wanted to buy — 8,000 gallon coiled tank cars in good interchange condition. **Contact TransGo Inc., 235 Montgomery St., #1633. San Francisco, California 94104**

Help Wanted

Traffic Manager for large hardwood lumber manufacturer in Northern Lake States. Experienced in rail and truck routing, tariffs, hearings, etc. Industrial experience desired, but not essential. Send complete details on experience, salary rquirements, etc., in first reply. Railway Age, Box 217 —14 E. Jackson Blvd., Chicago, Ill.

FOR SALE

Special Private Train
Beautiful Antique Decor
I.C.C. operating — TV & Intercom
Bar and Player Piano
Complete Sales Trainer
Conference Train
Personnel or Public Relations

M. Schiavone & Sons Inc.
135 Front St., New Haven, Conn. 06513
R. R. Hare — 203-777-2591

Advertisers' Index

Aeroquip Corporation 41
American Steel Foundries, Inc., Amsted Industries 20-21
Collins Radio Company .....IFC
Farrel Corporation 3
General American Transportation Corp., Tank Car Div. ..24-25
General Electric Company, Transportation Systems Div. 9
General Railway Signal Company 28-29
General Steel Industries, Inc. 13
Kerite Company, The .....IBC
Marquardt Industrial Products Co 6
National Castings Division, Midland-Ross Corp. 34-35
Railway Educational Bureau, The 42
Stanray Corporation 10-11
Sumitomo Metal Industries 30
United States Steel 16-17
Waugh Equipment Company ..... BC

SALES ENGINEER

For General Railway Signal Company. The man we want will be responsible for communicating and selling all GRS systems to assigned customers. He will have at least five years in railway signaling and a college degree (or equivalent). Our man will be a fast mover, creative, and promotable. This is a position for a man ready to advance on his accomplishments. If you are our man, please send resume to L.C. Williams, Jr., Employment Supervisor, General Railway Signal Co., Box 600, Rochester, N.Y. 14602.

Advertising Sales Department

C. J. Fisher, vice president—sales, Chicago

New York, N. Y. 10007,
30 Church St., (212) 964-3060
W. A. Cubbage—regional sales manager
Charles E. Keil—district manager

Chicago, Ill. 60604,
14 E. Jackson Blvd.
(312) 427-3501
K. F. Sheeran—regional vice president;
John M. Brennan—regional sales manager
Peter Hoagland
Ross Mandic
—district managers

Lakewood, Ohio 44107,
12700 Lake Ave., Apt. 1310
(216) 226-8038
Harry H. Melville—vice president

Pittsburgh, Pa. 15219, Room 720,
(412) 471-7871
Frick Building
William M. Champion—regional sales manager
Ronald M. Giallonardo—district manager

Atlanta, Ga. 30309,
22 Eighth St., N. E.,
TRinity 2-6720—J. S. Crane

Dallas, Tex. 75219,
3636 Cedar Springs (#207)
(214) 521-2322
Joseph Sanders

Los Angeles, Cal. 90017,
1313 West Eighth St.
(213) 483-8414
Fred Klaner, Jr.

San Francisco, Cal. 94133,
515 Pacific Ave.
(415) 421-7004
Lewis A. Vogler & Co.

London S. W. 1, England
TRafalgar 6318
67/68 Jermyn St., St. James's
Max F. Holsinger, Peter Clifton, F. E. Mizen

Manchester 22, England
Hale top
Wythenshawe Civic Center
Ian Goulden

Paris, 8e, France
70 Rue de Ponthieu
Stephen Brown-Joussard

4 Düsseldorf-Rath
Eitelstrasse 32
Max F. Holsinger, E. Hillerbrand, Herbert Haibt, Reinhard Schomburg

Tokyo, Japan
Sun Gain Shia, Ltd.
Shiba Nikkatsu Bldg.
13, Shiba Park
Minato-Ku
C. H. Yiu, Managing Director

VIEWPOINT

Do labor and management really know each other?

In a far-ranging conversation not long ago, several long-time and presumably competent observers of the labor-management scene were wondering why rail unions and rail management so often seem unable to get together on what might indelicately be termed, in some quarters, the "gut" issues.

All kinds of theories were advanced. Finally, the group fell silent—until one member shyly suggested that perhaps the parties don't really know each other well enough.

At first blush, the suggestion seemed ridiculous. Over the past decade, at least, there has hardly been a time when labor and management people weren't talking with—or at—each other. There have been many times when a negotiator, on either side, was seeing more of his fellow negotiators than of his wife and kids.

But this, of course, wasn't—and isn't—the point. The real point of the observation had to do with top-level person-to-person dealings—the kind that have now been proposed by top-level people in both labor and management.

Speaking for the Railway Labor Executives' Association, Chairman George E. Leighty has called for a meeting with a committee of railroad presidents to develop "new attitudes and new policies." Speaking for a committee formed by the AAR board, Illinois Central President William B. Johnson has carried the proposal a step further, suggesting that a preliminary meeting be held to draw up an agenda for top-level discussion.

Railway Age, for one, believes that such labor-management conversations are (1) most welcome, (2) long overdue, and (3) perhaps even likely to produce something of considerable value. There are, however, certain ground-rules that come to mind when the positive and negative aspects of top-level meetings are weighed.

Summit meetings, for instance, should not be used for propaganda purposes for either side's exclusive use. They should not be used as cutting tools for slicing the operating base out from under negotiators. They should not be used as ego-gratifiers.

SUMMIT MEETINGS SHOULD AIM FOR BIG GOALS

Summit meetings should be used for summit purposes—that is, for purposes related to the good of the industry, its managers, its employees, its owners, its customers, the nation it serves. Anything less would be an insult and a waste of time.

In his proposal, IC's Bill Johnson cites safety, research, education, legislation as specifics among "many areas of mutual interest and concern that . . . can be advantageously discussed." In his original statement, RLEA's George Leighty calls for adoption of five "proper new policies"—but, perhaps unfortunately, he leaves the strong impression that it is management, not labor, which will have to change its attitudes if there's to be improvement in relations.

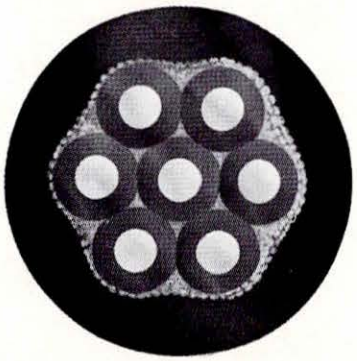
Obviously, there is no guarantee that a summit meeting, or meetings, will be worth the effort. But the effort, an honest effort on both sides, should be made.

Time, after all, does seem to be running short.

on guard

This is an end view of the source chamber section of a mass spectrometer. The instrument identifies and counts the isotopes in analyzing samples of atomic fuels. White heat reduces the samples to an ionized gas. Measurement of the beam's intensity indicates the quality of the fuel. Specially engineered cladding provides the very utmost in protection.

Below is an end view of a Kerite cable. Specially clad and specially engineered, it provides the protection for the electrical integrity of the cables needed in nuclear power plants . . . against radiation, high temperature, and fire. Nuclear plants can count on Kerite cable today because Kerite research, augmented by many decades of field performance, anticipated their needs. Kerite research and experience are your best assurance of cable performance tomorrow. The Kerite Company · Principal Offices: New York, Chicago, Seymour, Connecticut · Sales Representation Throughout the United States.



Kerite

the cable that lasts...and lasts...and lasts...

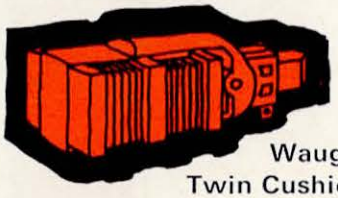
IF IT ROLLS ON RAILS... ....IT SHOULD BE CUSHIONED BY WAUGH

RD68 1116
GENEVA COLLEGE
MCCARTNEY LIBRARY
BEAVER FALLS PA
15010

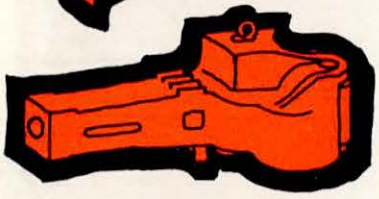
Waugh has over 40 years experience in meeting the exacting requirements of railroad car cushioning. All products are designed for the ultimate efficiency, to help cut costs and to be ruggedly dependable. They also meet A.A.R. specifications where applicable. Waugh Equipment—just naturally a part of progress.

Details and Brochures on all Products Available on request

Waugh RT Couplings
for Transit Equipment



Waugh
Twin Cushion Draft Gears



Waugh
DYNACOUPLER
for Laboratory
Test and
Dynamometer Cars

Waugh
Draft Gears
All A.A.R. Approved

Waugh Center Castings
for all Cushioned
Underframe Cars

Waugh Caboose Cushion Underframes
for New Cars or Conversions
Hydra Cushion Underframes

If it rolls on rails . . .
WAUGH
. . . it should be cushioned by Waugh

WAUGH EQUIPMENT COMPANY
332 S. Michigan Avenue,
Chicago, Illinois 60604

MEMBER RPI RAILWAY PROGRESS INSTITUTE

WAYNE TRANSPORTATION EQUIPMENT

Sales offices coast to coast and in Canada • New York • Philadelphia • Roanoke • St. Louis • San Francisco • Montreal

Circle 2 on reader service coupon